



CTE Annual Report: 2018-19 to 2020-21

Part 1: Sections, Headcount, Outcomes

August 4, 2021

Context

This briefing provides a high level overview of CTE programs in the District for the academic years of 2018-19 to 2019-20 (includes Summer, Fall, and Spring) in regards to sections, headcount, enrollments, and course success rates, with a comparison of outcomes in Spring semesters to isolate the effect of transitioning most instruction online due to the COVID-19 pandemic.

This report will be followed with a second report containing data on CTE student majors, completion of 9+ CTE units in an academic year, and completion of CTE awards and certificates.

Findings

Sections

- Between 29% and 30% of sections offered Districtwide were CTE from 2018-19 to 2020-21 (in 2020-21, City/ECC: 22%, Mesa: 23%, Miramar: 34%, Continuing Education: 49%).
- CTE courses accounted for 92% of on-campus courses in 2020-21.

Headcount

- Half of all students across the district enrolled in a CTE course in 2020-21 (City/ECC: 39%, Mesa: 39%, Miramar: 46%, Continuing Education: 47%).
- Over the last three years, Latinx students made up the largest group of CTE students at City College/ECC (45%) and the College of Continuing Education (36%), and white students made up the largest group of CTE students at Mesa College (38%) and Miramar College (39%).

Success Rates

- Across the colleges, success rates in CTE courses across the credit colleges have remained between 79% and 80%. This is higher than success rates for non-CTE courses (72% to 73%).
- Across the credit colleges, success rates in CTE courses decreased 4% in Spring 2020 compared to the prior Spring. The impact of COVID-19 on course success rates varied significantly by institution (City/ECC: -7%, Mesa: +1%, Miramar: -6%).
- Success rates for male students at City College/ECC and Miramar College were particularly impacted by COVID-19 (-9% and -8% compared to Spring 2019).
- Across the colleges, success rates in CTE courses originally scheduled online increased 3% from 2018-19 to 2019-20, from 71% to 74%. In 2020-21, when instruction was primarily delivered online, online success rates increased an additional 4%, to 78% (City/ECC: 76%, Mesa: 78%, Miramar: 79%).
- Across the colleges, success rates in CTE courses increased for African American, Asian, Filipino, and White students since 2018-19 (+4%, +3%, +2%, and +1%, respectively), and decreased for Native American and Multi-ethnicity students (-7% and -1%). Gaps in success rates have grown for Latinx students, and remain large for African American students.

Metrics and Definitions

- **CTE Enrollment:** An enrollment in a section with a Student Accountability Model (SAM) code of Apprenticeship (A), Advanced Occupational (B), or Clearly Occupational (C), or a Taxonomy of Program (TOP) code listed on the California Community Colleges Strong Workforce Program website¹ as “CTE.”
- **Enrollment:** An instance of a student taking a class. One student taking two classes counts twice.
- **Headcount:** Unduplicated count of students. One student taking two classes counts once.
- **Online:** In 2018-19 or 2019-20, a section scheduled fully online, partially online, or as a hybrid. In 2020-21, a section scheduled either as asynchronous or synchronous Online.
- **Success Rate:** The count of successful enrollments out of total valid enrollments as of end-of-term. In Spring 2020 going forward, includes Excused Withdrawals (EWs) as an unsuccessful enrollment (EWs have typically been excluded from Success Rate calculations, but are included Spring 2020 going forward to reflect the impact of COVID-19).

Exclusions

Unless otherwise noted, data reflected in this briefing reflects valid enrollments as of end-of-term.

- Tentative, cancelled, and tutoring sections excluded.
- Credit by exam excluded.
- For the credit colleges, non-state supported, apprenticeship, and non-credit sections excluded.
- For the College of Continuing Education, apprenticeship, fee, and contract sections excluded.
- Enrollments in duplicate COVID-19 sections for Spring 2020 at the College of Continuing Education excluded. As part of Continuing Education’s transition to online instruction, new section identifiers were created for all sections which transitioned online. As of the production of this report, investigations are currently under way to identify which enrollments in these sections were maintained from before the transition (and should be excluded), and which enrollments were new (and should be included).

Additional Notes

- Headcount disaggregations for non-binary students became available in 2019-20 as the district transitioned to Campus Solutions; this data was not available in 2018-19.

¹ https://www.calpassplus.org/Launchboard/SWP-MDD?metric=SW_122#_Toc46492562

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CTE Sections

1. Sections: There were 3,127 CTE sections offered in 2020-21 across the district, or 30% of all sections that year.

Across the credit colleges, there were 2,236 CTE sections scheduled in 2020-21, or 26% of all sections at the credit colleges. CTE section counts have decreased 22% compared to 2018-19 (non-CTE section counts decreased 24%).

There were 891 CTE sections at the College of Continuing Education in 2020-21, or 49% of sections there. College of Continuing Education CTE sections counts have decreased 48% from 2018-19 (non-CTE sections counts decreased 59%).

At the credit colleges, decreases in CTE sections at City College were more significant (-30%) than at than at Mesa College (-15%) and Miramar College (-24%).

Over the last three years, CTE courses have accounted for 22%-24% of all sections at City College/ECC, 21%-23% at Mesa College, and 33%-34% at Miramar College.

See Table 1 on the next page for more detail.

Figure 1. CTE Sections, 2018-19 to 2020-21

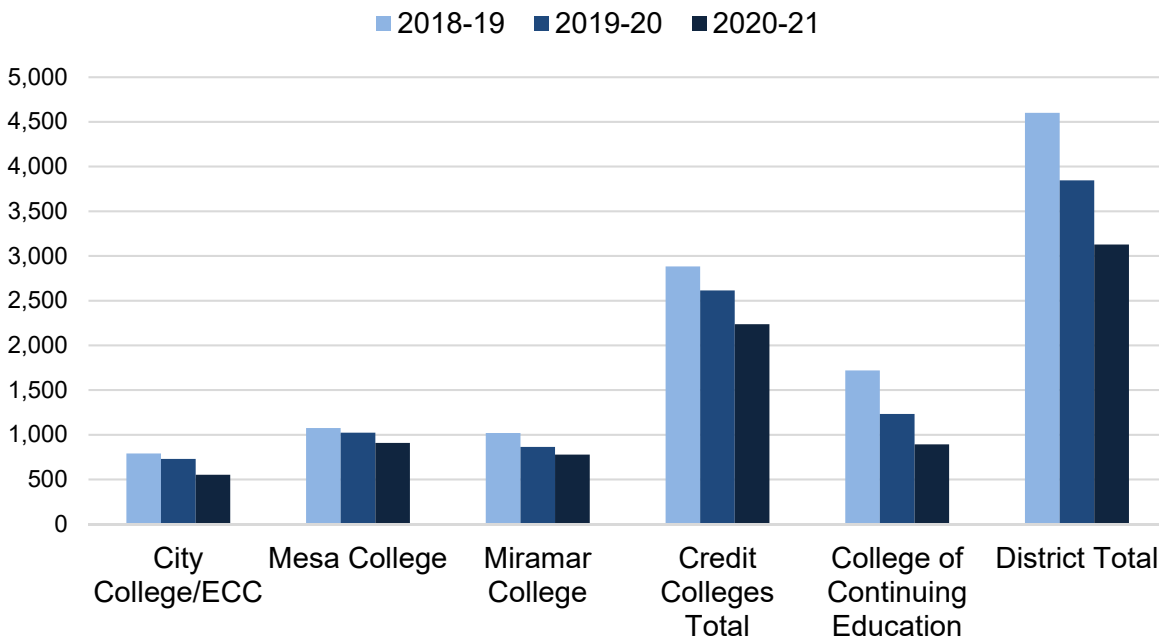


Table 1. Sections by Academic Year and CTE status, 2018-19 to 2019-20

		2018-19		2019-20		2020-21		18-19 to 20-21 Diff.	18-19 to 20-21 % Change
		Count	%	Count	%	Count	%		
City College/ECC	CTE	790	24%	728	24%	551	22%	-239	-30%
	Non-CTE	2,493	76%	2,349	76%	1,918	78%	-575	-23%
	Total	3,283	100%	3,077	100%	2,469	100%	-814	-25%
Mesa College	CTE	1,074	21%	1,022	21%	908	23%	-166	-15%
	Non-CTE	4,069	79%	3,856	79%	3,075	77%	-994	-24%
	Total	5,143	100%	4,878	100%	3,983	100%	-1,160	-23%
Miramar College	CTE	1,018	34%	863	33%	777	34%	-241	-24%
	Non-CTE	1,981	66%	1,766	67%	1,506	66%	-475	-24%
	Total	2,999	100%	2,629	100%	2,283	100%	-716	-28%
Credit Colleges Total	CTE	2,882	25%	2,613	25%	2,236	26%	-646	-22%
	Non-CTE	8,543	75%	7,971	75%	6,499	74%	-2,044	-24%
	Total	11,425	100%	10,584	100%	8,735	100%	-2,690	-24%
Continuing Education	CTE	1,719	43%	1,232	43%	891	49%	-828	-48%
	Non-CTE	2,251	57%	1,606	57%	913	51%	-1,338	-59%
	Total	3,970	100%	2,838	100%	1,804	100%	-2,166	-55%
District Total	CTE	4,601	30%	3,845	29%	3,127	30%	-1,474	-32%
	Non-CTE	10,794	70%	9,577	71%	7,412	70%	-3,382	-31%
	Total	15,395	100%	13,422	100%	10,539	100%	-4,856	-32%

Note. Excludes tentative and cancelled sections. Excludes sections with no enrollments. Excludes non-state supported and non-credit sections from the credit colleges. Excludes apprenticeship sections from City College. Excludes fee and apprenticeship sections from the College of Continuing Education.

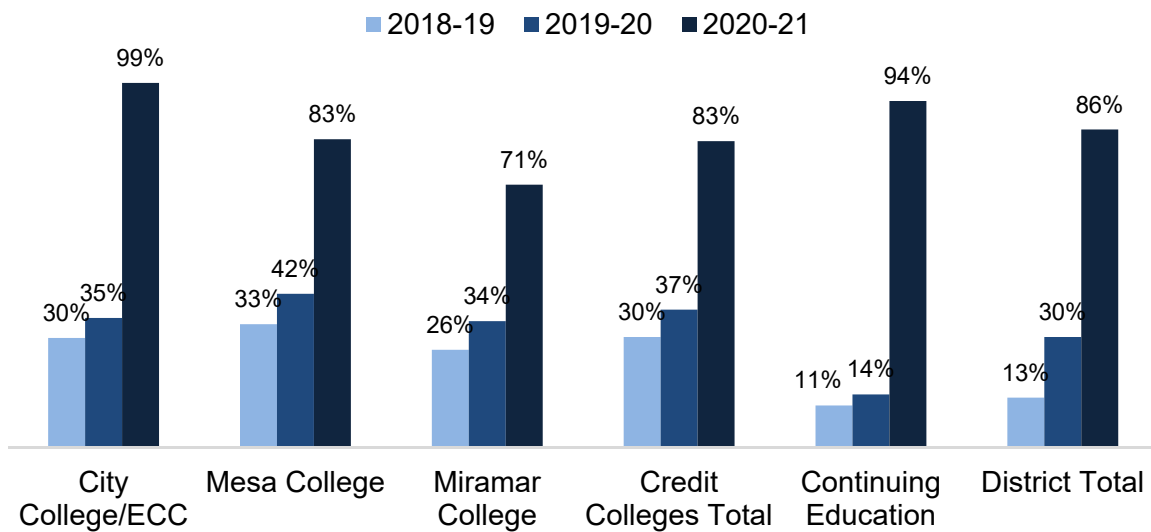
2. Sections by Modality: CTE sections had been increasingly scheduled online as of the beginning of the Spring 2020 term. As part of the district’s response to COVID-19, instruction was moved primarily online for the 2020-21 academic year.

As of the beginning of the Spring 2020 semester, online sections accounted for 37% of all CTE sections at the credit colleges in 2019-20, compared to 30% the prior year. At the College of Continuing Education, online CTE sections accounted for 14% of 2019-20 sections, compared to 11% the prior year.

In 2020-21, 86% of CTE sections across the district were scheduled online (City/ECC: 99%, Mesa: 83%, Miramar: 71%, CE: 94%).

See Table 2 on the next page for more detail.

Figure 2. Online CTE Sections, % of All CTE Sections, 2018-19 to 2020-21



There were 2,752 sections **originally scheduled online** across the district in 2019-20 (CTE and non-CTE). 42% of all online sections in 2019-20 were in CTE courses (City/ECC: 38%, Mesa: 39%, Miramar: 41%, Continuing Education: 63%). This was comparable to 2018-19, when 43% of all online sections were in CTE courses (City/ECC: 41%, Mesa: 37%, Miramar: 40%, Continuing Education: 70%).

Table 2. CTE Sections by Modality, 2018-19 to 2020-21

		2018-19		2019-20		2020-21	
		Count	%	Count	%	Count	%
City College/ECC	Online	234	30%	255	35%	544	99%
	On-campus	556	70%	473	65%	7	1%
	Total	790	100%	728	100%	551	100%
Mesa College	Online	358	33%	425	42%	758	83%
	On-campus	716	67%	597	58%	150	17%
	Total	1,074	100%	1,022	100%	908	100%
Miramar College	Online	269	26%	295	34%	553	71%
	On-campus	749	74%	568	66%	224	29%
	Total	1,018	100%	729	100%	777	100%
Credit Colleges Total	Online	861	30%	975	37%	1,855	83%
	On-campus	2,021	70%	1,638	63%	381	17%
	Total	2,882	100%	2,613	100%	2,236	100%
College of Continuing Education	Online	195	11%	178	14%	835	94%
	On-campus	1,524	89%	1,054	86%	56	6%
	Total	4,974	100%	1,232	100%	891	100%
District Total	Online	1,056	13%	1,153	30%	2,690	86%
	On-campus	3,545	45%	2,692	70%	437	14%
	Total	7,856	100%	3,845	100%	3,127	100%

Note. Excludes tentative and cancelled sections. Excludes sections with no enrollments. Excludes non-state supported and non-credit sections from the credit colleges. Excludes apprenticeship sections from City College. Excludes fee and apprenticeship sections from the College of Continuing Education.

3. On-campus CTE courses in 2020-21: Nearly all on-campus instruction in the 2020-21 academic year was accounted for by CTE courses (437 of the 477 on-campus sections across the District in 2020-21 were CTE, or 92%).

While the majority of CTE courses in 2020-21 were offered online in response to the COVID-19 pandemic (86% across the district), a number of courses were offered on-campus:

- **City College On-campus CTE courses** included CHIL270 (3 sections)
- **Mesa College On-campus CTE courses** included WORK270 (16 sections), FASH270 (8 sections), and CHIL270 (7 sections).
- **Miramar College On-campus CTE courses** were largely in ADJU (79 sections), AVIM (60 sections), FIPT (43 sections), and MLTT (35 sections).
- **College of Continuing Education On-campus CTE courses** were largely in MECT431 (22 sections), HLTH605 and HLTH606 (12 sections), and INDT (20 sections).

Table 3. On-campus sections, 2020-21

		Sections	% of Total On-campus Sections
CTE	City College/ECC	7	1%
	Mesa College	150	31%
	Miramar College	224	47%
	Credit Colleges Total	381	80%
	College of Continuing Education	56	12%
	Districtwide Total	437	92%
Non-CTE	City College/ECC	27	6%
	Mesa College	12	3%
	Miramar College	1	0%
	Credit Colleges Total	40	8%
	College of Continuing Education	0	0%
	Districtwide Total	40	8%
Total On-campus, Districtwide		477	100%

Note 1. Excludes tutoring, canceled, and tentative sections.

Note 2. Excludes non-state supported, apprenticeship, and non-credit sections from the credit colleges.

4. Top CTE Courses: Business courses account for 3 of the top 15 CTE courses at each college by section count across the last three years (BUSE 140, BUSE 119, BUSE 100).

Other CTE courses most commonly offered at the credit colleges include CHIL 101, NUTR 150, ACCT 116A, ACCT 116B, and MARK 100.

It appears that COVID-19 impacted City College's ability to offer WORK 270: that college offered 15 and 10 sections of WORK 270 in 2018-19 and 2019-20, and just 1 section in 2020-21. Cosmetology labs at City College (COSM 90L and COSM 80L) were also similarly impacted (2019-20: 7 sections of each course, 2020-21: 3 sections of each course).

Mesa College reduced BUSE 140 and CISC 181 sections in 2020-21 (-6 and -7 sections, respectively), compared to the prior year.

Compared to 2019-20, Miramar College reduced sections in 2020-21 in ADJU 361S (-13), ADJU 300A (-12), and EMGM 105A (-7). On the other hand, there were 16 more sections in ADJU 361R (Regional Officer Training) in 2020-21 compared to 2019-20.

For more detail, see Tables 22 and 23 in the Appendix.

Table 4. Top 5 CTE Courses by Section Count, 2018-19 to 2020-21

		2018-19	2019-20	2020-21	3-Year Total
City College/ECC	CHIL 101	21	20	20	61
	NUTR 150	12	18	19	49
	CISC 181	16	13	13	42
	ACCT 116A	14	12	11	37
	RTVF 160	11	11	11	33
Mesa College	BUSE 140	35	33	27	95
	CISC 181	33	33	26	92
	NUTR 150	30	31	28	89
	ACCT 116A	34	29	26	89
	BUSE 119	29	23	22	74
Miramar College	ADJU 361R	30	21	37	88
	BUSE 100	21	19	19	59
	EMGM 105A	23	21	14	58
	ADJU 101	20	16	16	52
	EMGM 106	23	12	14	49
College of Continuing Education	PASV 530	59	57	53	169
	OFSY 575	54	35	29	118
	OFSY 596	58	41	18	117
	OFSY 541	54	40	15	109
	OFSY 577	53	33	13	99

5. In-service/Public Safety: There were 29% fewer sections of In-service/Public Safety courses in Administration of Justice and Fire Protection in 2020-21 compared to 2018-19. There were 32% fewer enrollments.

The majority of these sections were scheduled on-campus, and COVID-19 impacted Miramar College's ability to offer these courses. This decrease contributed to decreasing CTE enrollments at Miramar College (-24% in 2020-21 compared to 2018-19, or 6,725 fewer CTE enrollments).

Table 5. Declining In-service/Public Safety ADJU and FIPT Sections and Enrollments

		2018-19	2019-20	2020-21	18-19 to 20-21 Diff.	% Change 18-19 to 20-21
ADJU	Enrollments	4,891	3,609	3,228	-1,663	-34%
	Sections	124	88	79	-45	-36%
FIPT	Enrollments	1,500	1,129	1,298	-202	-13%
	Sections	65	46	50	-15	-23%
Total	Enrollments	6,391	4,738	4,526	-1,865	-29%
	Sections	189	134	129	-60	-32%

Note. There is also a decrease in In-service/Public Safety EMGM courses over this period; a possible inconsistency in a course attribute for one EMGM section in 2019-20 is being investigated as of the production of this report.

Headcount and Demographics

6. Headcount: There were 35,713 students enrolled in at least one CTE course across the District in 2020-21, half of all students.

This is 22% fewer CTE students than in 2018-19 (non-CTE student headcount decreased by 37% over this same period).

Across the credit colleges, CTE student headcount has decreased by 13% since 2018-19, while non-CTE student headcount decreased by 18%. 51% of students enrolled across the credit colleges took at least one CTE course in 2020-21, up slightly from 49% in 2018-19.

At City College, student headcount has remained stable over the last three years (CTE: +0%, non-CTE: +1%). CTE students have made up between 39% and 41% of City College students since 2018-19.

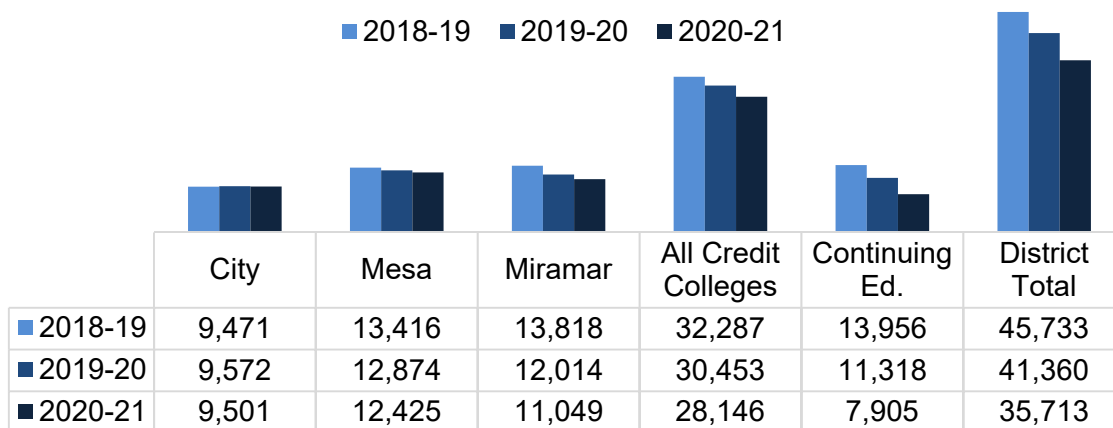
At Mesa College, CTE headcount decreased 7% over the last three years (-11% for non-CTE students). CTE students accounted for 38%-39% of Mesa College students over this time.

The count of CTE students at Miramar College decreased 20% over the last three years, from 13,818 to 11,049. This decrease was driven by a decrease in In-service and Public Safety courses in 2020-21 (see Highlight 8). CTE students made up half of Miramar College students in 2018-19 and 2019-20, and 46% in 2020-21.

Overall headcount at the College of Continuing Education decreased 46% in 2020-21 compared to the prior year, from 30,701 in 2019-20 to 16,656². CTE student headcount decreased less (-30%) than the non-CTE student headcount (-55%). The proportion of students taking a CTE course at the College of Continuing Education was higher in 2020-21 (47%) than in 2019-20 (37%).

See Table 19 in the appendix for more detail.

Figure 3. CTE Student Headcount



² Excludes any College of Continuing Education students who exclusively enrolled a) in Spring 2020, b) after the transition to online instruction, c) in sections that were transitioned online. All other students are included.

Table 6. Headcount by Academic Year

		2018-19		2019-20		2020-21		18-19 to 20-21 Diff.	18-19 to 20-21 % Change
		Count	%	Count	%	Count	%		
City College/ ECC	CTE	9,471	39%	9,572	41%	9,501	39%	30	0%
	Non-CTE	14,806	61%	13,706	59%	14,994	61%	188	1%
	Total	24,277	100%	23,278	100%	24,495	100%	218	1%
Mesa College	CTE	13,416	38%	12,874	39%	12,425	39%	-991	-7%
	Non-CTE	21,858	62%	20,404	61%	19,468	61%	-2,390	-11%
	Total	35,274	100%	33,278	100%	31,893	100%	-3,381	-10%
Miramar College	CTE	13,818	51%	12,014	50%	11,049	46%	-2,769	-20%
	Non-CTE	13,260	49%	11,856	50%	13,153	54%	-107	-1%
	Total	27,078	100%	23,870	100%	24,202	100%	-2,876	-11%
Credit Colleges Total	CTE	32,287	49%	30,453	49%	28,146	51%	-4,141	-13%
	Non-CTE	33,289	51%	31,130	51%	27,254	49%	-6,035	-18%
	Total	65,576	100%	61,583	100%	55,400	100%	-10,176	-16%
College of Continuing Education	CTE	13,956	37%	11,318	37%	7,905	47%	-6,051	-43%
	Non-CTE	23,860	63%	19,383	63%	8,751	53%	-15,109	-63%
	Total	37,816	100%	30,701	100%	16,656	100%	-21,160	-56%
District Total	CTE	45,733	45%	41,360	45%	35,713	50%	-10,020	-22%
	Non-CTE	56,333	55%	49,828	55%	35,565	50%	-20,768	-37%
	Total	102,066	100%	91,188	100%	71,278	100%	-30,788	-30%

7. Districtwide Representation by Ethnicity: Over the last three years, the CTE student population across the district has had a slightly higher representation of White students than the non-CTE student population, and a slightly lower representation of Asian and Latinx students.

Compared to 2018-19, the proportion of Latinx CTE students has increased 2% across the district, and the proportion of White CTE students has decreased 2%.

CTE and non-CTE student representation have been within 1% over the last three years, with the following exceptions:

- CTE students were less likely to be Asian in 2018-19 and 2019-20 (+2%-3%).
- CTE students were less likely to be Latinx in 2018-19 (+2%).
- CTE students were more likely to be White over the last three years (+5% - +2%).

Table 7. CTE Student Representation, by Ethnicity, Districtwide

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
African American	7%	7%	6%	-1%
Asian	11%	10%	10%	0%
Filipino	4%	5%	5%	0%
Latinx	35%	37%	37%	2%
Multi-Ethnicity	5%	6%	6%	1%
Native American	0%	0%	0%	0%
Pacific Islander	1%	1%	0%	0%
Unknown	3%	3%	3%	0%
White	34%	31%	31%	-2%
Total	100%	100%	100%	---

Note. Values of 0% indicate less than 1%.

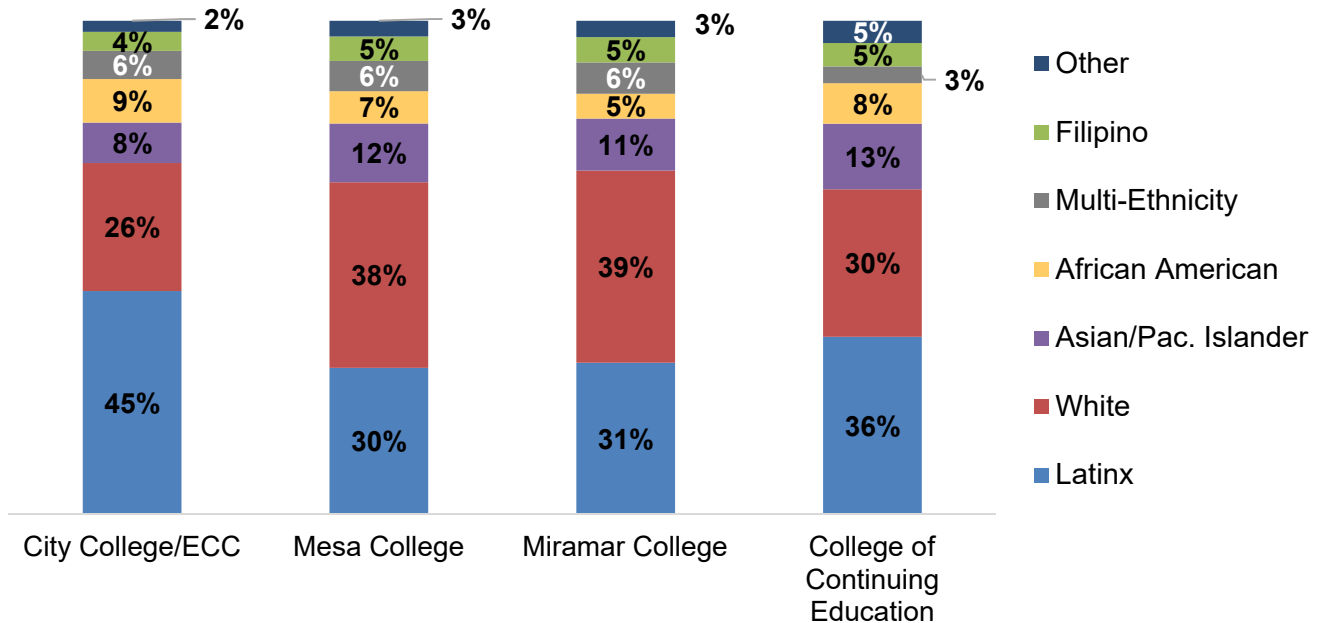
Table 8. Non-CTE Student Representation, by Ethnicity, Districtwide

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
African American	7%	7%	7%	0%
Asian	13%	13%	11%	-1%
Filipino	4%	4%	4%	1%
Latinx	37%	38%	38%	1%
Multi-Ethnicity	4%	5%	6%	2%
Native American	0%	0%	0%	0%
Pacific Islander	0%	0%	0%	0%
Unknown	5%	3%	4%	-1%
White	29%	30%	29%	0%
Total	100%	100%	100%	---

Note. Values of 0% indicate less than 1%.

8. **College Representation by Ethnicity:** Over the last three years, Latinx students made up the largest group of CTE students at City College/ECC (45%) and the College of Continuing Education (36%), and white students made up the largest group of CTE students at Mesa College (38%) and Miramar College (39%).

Figure 4. CTE Student Representation, by Ethnicity, 2018-19 to 2020-21



Note. "Other" includes Native American and Unreported.

Compared to 2018-19, Latinx student representation among CTE students increased at Mesa College (2%), Miramar College (+3%), and the College of Continuing Education (+2%); Latinx student representation decreased 3% at City College/ECC. White student representation decreased 3% at Mesa and Miramar Colleges, and decreased 4% at the College of Continuing Education. Other significant changes in representation since 2018-19 are included in Table 9 below.

Table 9. Change in representation, CTE Students, Ethnicity, 2018-19 to 2020-21

Institution	Ethnicity	2018-19	2020-21	Change
City	Latinx	46%	43%	-3%
	Asian/Pac. Islander	11%	13%	+2%
Mesa	Latinx	29%	31%	+2%
	White	39%	36%	-3%
Miramar	Latinx	30%	33%	+3%
	White	40%	38%	-3%
Continuing Ed.	African American	9%	7%	-2%
	Latinx	34.3%	36.6%	+2.3%
	White	32%	28%	-4%

Note. Representation shown to the tenth decimal place to avoid apparent rounding errors.

9. **District Representation by Gender: Representation by gender among CTE students has been relatively stable across the district over the last three years. During that time, female students accounted for a lower proportion of CTE students (53% to 54%) than of non-CTE students (59% to 61%).**

Table 10. CTE Student Population, by Gender, Districtwide

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
Female	54%	53%	54%	0.0%
Male	46%	47%	46%	-0.4%
Non-Binary	n/a	0%	0%	n/a
Unreported	0%	0%	0%	0.3%
Total	100%	100%	100%	---

Note. Values of 0% indicate less than 1%.

Table 11. Non-CTE Student Population, by Gender, Districtwide

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
Female	59%	59%	61%	2.4%
Male	41%	40%	38%	-2.8%
Non-Binary	n/a	0%	0%	n/a
Unreported	0%	1%	0%	0.2%
Total	100%	100%	100%	---

Note. Values of 0% indicate less than 1%.

10. Representation by Gender, at each College: Over the last three years, CTE female student representation at the college level has grown by 1%-3% at each of the credit colleges (City/ECC: +1%, Mesa: +2%, Miramar: +2%), and decreased by 3% at the College of Continuing Education.

Table 12. CTE Student Population Representation by Gender, by College

		2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
City College/ECC	Female	54%	54%	55%	+1%
	Male	46%	46%	44%	-1%
	Non-Binary	n/a	0%	0%	n/a
	Unreported	0%	0%	0%	0%
	Total	100%	100%	100%	---
Mesa College	Female	57%	56%	59%	+2%
	Male	43%	43%	40%	-3%
	Non-Binary	n/a	0%	0%	n/a
	Unreported	0%	0%	0%	0%
	Total	100%	100%	100%	---
Miramar College	Female	40%	42%	42%	+2%
	Male	60%	57%	57%	-3%
	Non-Binary	n/a	0%	0%	n/a
	Unreported	0%	0%	1%	+1%
	Total	100%	100%	100%	---
College of Continuing Education	Female	64.4%	62%	61.7%	-2.7%
	Male	35%	38%	38%	+3%
	Non-Binary	n/a	0%	0%	n/a
	Unreported	0%	1%	0%	0%
	Total	100%	100%	100%	---

Note 1. Representation shown to the tenth decimal place to avoid apparent rounding errors.

Note 2. Values of 0% indicate less than 1%.

Course Outcomes: Success Rates

11. **Overall Success Rates: Across the colleges, success rates in CTE courses across the credit colleges have remained between 79% and 80%. This is higher than success rates for non-CTE courses (72% to 73%). Compared to 2019-20, when COVID-19 impacted the Spring 2020 term, CTE success rates in 2020-21 have increased (City: +3%, Mesa: +2%, Miramar: +1%).**

Table 13. CTE Success Rates

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.	19-20 to 20-21 Diff.
City College/ECC	76%	73%	76%	0%	3%
Mesa College	76%	77%	79%	3%	2%
Miramar College	85%	83%	84%	-1%	1%
All Credit Colleges	79%	78%	80%	1%	2%

Table 14. Non-CTE Success Rates

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.	19-20 to 20-21 Diff.
City College/ECC	69%	66%	69%	0%	3%
Mesa College	72%	73%	74%	2%	1%
Miramar College	75%	76%	75%	0%	-1%
All Credit Colleges	72%	72%	73%	1%	1%

12. **Success Rates, COVID-19: Across the credit colleges, success rates in CTE courses decreased 4% in Spring 2020 compared to the prior Spring. However, the impact of COVID-19 on course success rates varied significantly by institution (City/ECC: -7%, Mesa: +1%, Miramar: -6%).**

Table 15. CTE Success Rates, Spring Terms

	2019	2020	2021	Spr. 19 to Spr. 20 Diff.
City College/ECC	77%	70%	76%	-7%
Mesa College	76%	77%	78%	1%
Miramar College	85%	79%	83%	-6%
All Credit Colleges	80%	76%	79%	-4%

Table 16. Non-CTE Success Rates, Spring Terms

	2019	2020	2021	Spr. 19 to Spr. 20 Diff.
City College/ECC	69%	65%	68%	-4%
Mesa College	71%	70%	73%	-1%
Miramar College	75%	75%	75%	0%
All Credit Colleges	72%	70%	72%	-2%

Note. Excludes Intersession.

13. Success Rates, COVID-19, Gender: Success rates for male students at City College/ECC and Miramar College were particularly impacted by COVID-19 (-9% and -8% compared to Spring 2019).

CTE success rates for **male Latinx** students decreased at each of the colleges in Spring 2020 compared to Spring 2019 (City/ECC: -11%, Mesa: -3%, Miramar: -8%). **Male Pacific Islander** students had large decreases at City College/ECC (-27%) and Miramar College (-29%).

Success rates for **female Multi-Ethnicity** students decreased at each of the colleges in Spring 2020 compared to Spring 2019 (City/ECC: -10%, Mesa: -7%, Miramar: -4%). **Female Filipino** students had large decreases at City College (-12%) and Mesa College (-8%).

There was variation by college in which groups were impacted most heavily. See Tables 27 and 28 in the appendix for success rates by gender and ethnicity, by college.

Table 17. CTE Success Rates, Male Students, Spring Terms

	2019	2020	2021	Spr. 19 to Spr. 20 Diff.
City College/ECC	75%	66%	75%	-9%
Mesa College	73%	72%	75%	-1%
Miramar College	87%	79%	85%	-8%
All Credit Colleges	80%	73%	79%	-7%

Table 18. CTE Success Rates, Female Students, Spring Terms.

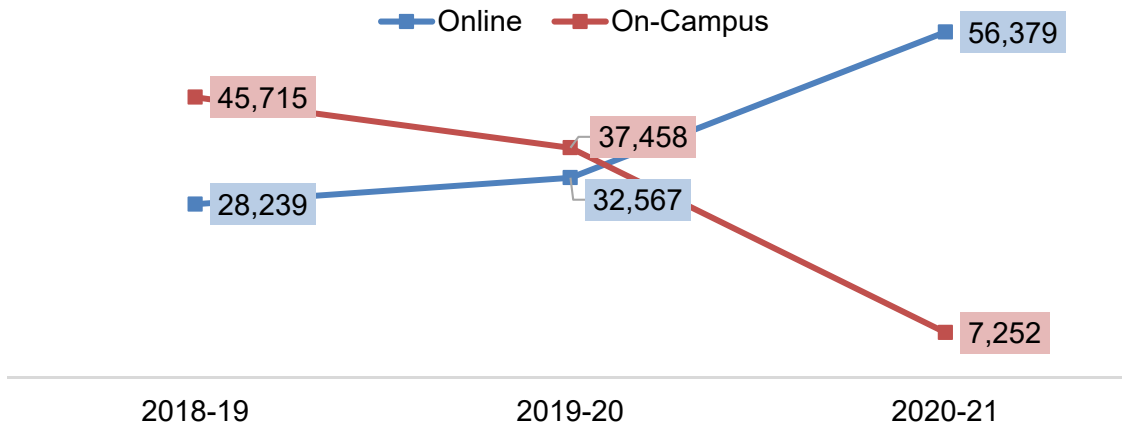
	2019	2020	2021	Spr. 19 to Spr. 20 Diff.
City College/ECC	79%	73%	77%	-6%
Mesa College	78%	80%	81%	2%
Miramar College	82%	79%	80%	-3%
All Credit Colleges	79%	78%	79%	-1%

Note. Excludes Intersession.

14. Credit Colleges Enrollments by Modality: From 2018-19 to 2019-20, CTE enrollments across the credit colleges in courses originally scheduled online increased 15% (City/ECC: +14%, Mesa: +20%, Miramar: +10). In 2020-21, when instruction was primarily delivered online in response to the COVID-19 pandemic, 89% of CTE enrollments were online (City/ECC: 98%, Mesa: 95%, Miramar: 74%).

See Table 25 in the appendix for enrollments by modality by institution.

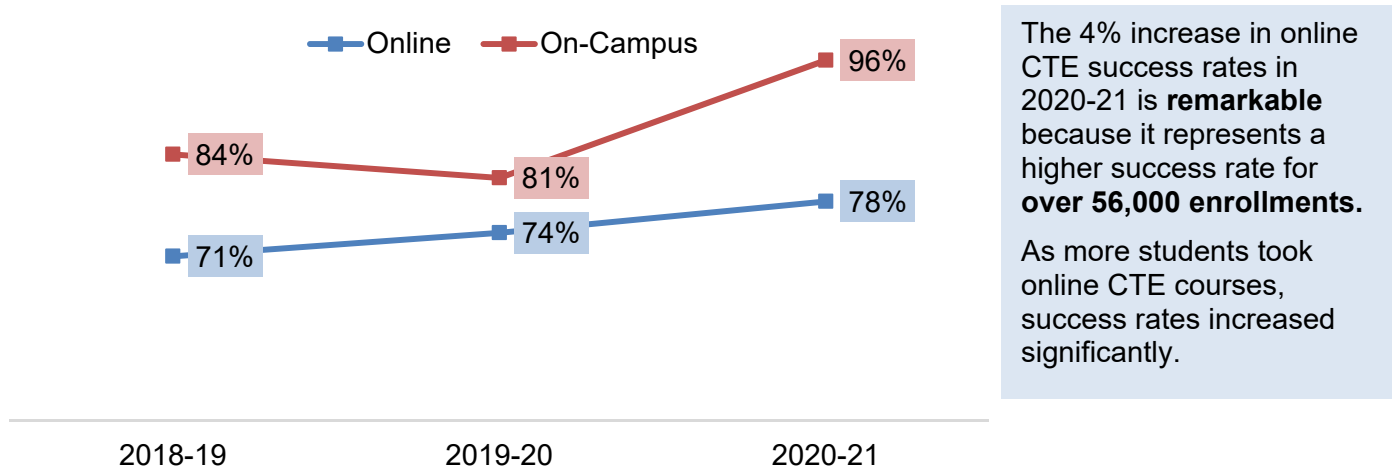
Figure 5. CTE Enrollments at the Credit Colleges, by Mode



15. Success Rates by Modality: Across the colleges, success rates in CTE courses originally scheduled online increased 3% from 2018-19 to 2019-20, from 71% to 74%. In 2020-21, when instruction was primarily delivered online, online success rates increased an additional 4%, to 78% (City/ECC: 76%, Mesa: 78%, Miramar: 79%).

96% of the 7,252 on-campus enrollments were successful in 2020-21 (these accounted for 11% of all enrollments in 2020-21). See Table 19 (next page) for course success rates by modality by college.

Figure 6. CTE Success Rates at the Credit Colleges, by Modality



The 4% increase in online CTE success rates in 2020-21 is **remarkable** because it represents a higher success rate for **over 56,000 enrollments**. As more students took online CTE courses, success rates increased significantly.

Table 19. CTE Success Rates, by Modality, by Institution

		2018-19	2019-20	2020-21	18-19 to 20-21 Diff.	19-20 to 20- 21 Diff.
City College/ECC	Online	69%	70%	76%	7%	6%
	On-campus	81%	75%	85%	4%	10%
Mesa College	Online	70%	76%	78%	8%	2%
	On-campus	80%	78%	96%	16%	18%
Miramar College	Online	74%	76%	79%	5%	3%
	On-campus	90%	87%	97%	7%	10%
All Credit Colleges	Online	71%	74%	78%	7%	4%
	On-campus	84%	81%	96%	12%	15%

16. Success Rates by Ethnicity: Across the colleges, success rates in CTE courses increased for African American, Asian, Filipino, and White students since 2018-19 (+4%, +3%, +2%, and +1%, respectively), and decreased for Native American and Multi-ethnicity students (-7% and -1%).

Success rates in CTE courses in 2020-21 were highest for Asian students (88%) and lowest for African American students (71%).

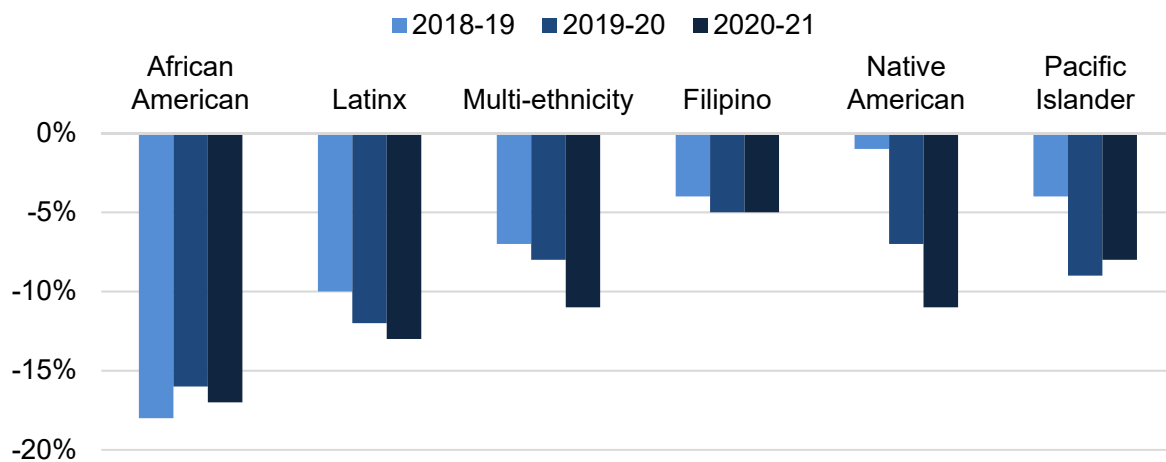
See Table 26 in the appendix for success rates by ethnicity by college.

Table 20. CTE Success Rates, by Ethnicity

	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
African American	67%	69%	71%	4%
Asian	85%	85%	88%	3%
Filipino	81%	80%	83%	2%
Latinx	75%	73%	75%	0%
Multi-Ethnicity	78%	77%	77%	-1%
Native American	84%	78%	77%	-7%
Pacific Islander	81%	76%	80%	-1%
Unknown	84%	78%	79%	-5%
White	84%	83%	85%	1%
Overall	79%	78%	80%	1%

Gaps in success rates for CTE courses remain. Compared to the group with the highest success rates (Asian students), gaps have grown larger for Latinx, Multi-ethnicity, and Native American students, even as overall success rates have increased. **The gap between success rates for African American students and for Asian students remains the largest,** both across the credit colleges and at each college. See Table 29 in the appendix for gaps between group with highest success rates and other ethnicities by college.

Figure 7. CTE Success Rate Gaps between highest group (Asian), All Credit Colleges



17. Success rates by Gender: Across the colleges, male and female success rates were comparable over the last three years. Female students have had higher success rates at City College and Mesa College, and male students have had higher success rates at Miramar College.

As noted in Section 13, success rates for male students at City College/ECC and Miramar College decreased significantly in Spring 2020; these decreases in contribute to the decreases shown in Table 18 below for the academic year for those groups.

Table 21. CTE Success Rates, by Gender and College

		2018-19	2019-20	2020-21	18-19 to 20-21 Diff.	19-20 to 20-21 Difference
City College/ECC	Female	78%	76%	77%	-1%	1%
	Male	74%	69%	75%	1%	6%
	Non-Binary	n/a	60%	70%	n/a	10%
	Unreported	n/a	64%	80%	n/a	16%
	Overall	76%	73%	76%	0%	3%
Mesa College	Female	78%	80%	81%	3%	1%
	Male	72%	73%	75%	3%	2%
	Non-Binary	n/a	100%	85%	n/a	-15%
	Unreported	100%	62%	68%	-32%	6%
	Overall	73%	77%	79%	6%	2%
Miramar College	Female	82%	81%	80%	-2%	-1%
	Male	87%	84%	86%	-1%	2%
	Non-Binary	n/a	67%	86%	n/a	19%
	Unreported	78%	96%	85%	7%	-11%
	Overall	85%	83%	84%	-1%	1%
All Credit Colleges	Female	79%	79%	80%	1%	1%
	Male	79%	77%	80%	1%	3%
	Non-Binary	n/a	67%	79%	n/a	12%
	Unreported	80%	76%	79%	-1%	3%
	Overall	79%	78%	80%	1%	2%

Talking Points

Report Finding	Discussion
<p>Online CTE courses accounted for 42% of all online sections across the district in 2019-20, before instruction was moved online in response to the COVID-19 pandemic (Section 2, page 7). In 2020-21, when the majority CTE courses were transitioned online, online success rates increased 4% (Section 15, page 20). This increase in success rates is remarkable as it reflects the majority of CTE enrollments that year (56,379, or 89% of the total).</p>	<p>CTE course offerings are diverse, but the transition to online instruction has not impeded student success.</p>
<p>Latinx representation in CTE courses is growing (Section 7, page 14), but gaps in success rates between Latinx students and the highest group have grown larger (Section 16, page 22).</p>	<p>Latinx students represent the largest or second-largest group of CTE students at each college. Success rate gaps for this group represent an increasingly concerning trend.</p>
<p>The gap between CTE success rates for African American students and the highest group has remained the largest over the last three years (Section 16, page 22).</p>	<p>Increased attention to support strategies for African American students is needed, as deep challenges to their success remain across the credit colleges.</p>
<p>The impact of COVID-19 on success rates varied by gender, ethnicity, and college (Section 13, page 19). Male Latinx and Pacific Islander students, and female Multi-Ethnicity and Filipino students all experienced larger decreases in success rates from Spring 2019 to Spring 2020 than other groups. These trends vary by college (see Tables 26 and 27, pages 29-30).</p>	<p>The intersections of ethnicity and gender carry important implications for how students' lives were impacted by the pandemic, and should inform strategies implemented to help these groups recover and improve academic progress.</p>

Appendix

Table 22. Top 15 CTE Course by Section Count, per college, part 1 of 2

		2018-19	2019-20	2020-21	3-Year Total
City College/ECC	CHIL 101	21	20	20	61
	NUTR 150	12	18	19	49
	CISC 181	16	13	13	42
	ACCT 116A	14	12	11	37
	RTVF 160	11	11	11	33
	ARTG 118	9	11	10	30
	BUSE 140	11	8	9	28
	WORK 270	15	10	1	26
	BUSE 119	9	8	8	25
	BUSE 100	7	8	10	25
	ARTG 100	7	9	8	24
	ARTG 106	7	8	8	23
	ACCT 116B	6	6	7	19
	PHOT 143	7	5	6	18
	MARK 100	5	6	7	18
	COSM 090L	8	7	3	18
	COSM 080L	8	7	3	18
	BUSE 092	6	6	6	18
Mesa College	BUSE 140	35	33	27	95
	CISC 181	33	33	26	92
	NUTR 150	30	31	28	89
	ACCT 116A	34	29	26	89
	BUSE 119	29	23	22	74
	ACCT 116B	24	22	20	66
	MEDA 110	21	21	21	63
	CHIL 101	22	21	19	62
	BUSE 100	23	20	18	61
	CISC 190	19	15	13	47
	WORK 270	10	17	16	43
	NUTR 153	10	12	12	34
	AMSL 150	9	11	10	30
	REAL 101	12	8	7	27
	MARK 100	10	9	8	27

Table 23. Top 15 CTE Course by Section Count, per college, part 2 of 2

		2018-19	2019-20	2020-21	3-Year Total
Miramar College	ADJU 361R	30	21	37	88
	BUSE 100	21	19	19	59
	EMGM 105A	23	21	14	58
	ADJU 101	20	16	16	52
	EMGM 106	23	12	14	49
	ACCT 116A	17	14	16	47
	ADJU 300A	26	15	3	44
	ACCT 116B	13	13	13	39
	NUTR 150	14	14	10	38
	BUSE 140	14	10	10	34
	MARK 100	13	9	11	33
	BUSE 119	12	11	10	33
	CHIL 101	12	12	8	32
	ADJU 361S	16	14	1	31
	ADJU 102	11	11	7	29
College of Continuing Education	PASV 530	59	57	53	169
	OFSY 575	54	35	29	118
	OFSY 596	58	41	18	117
	OFSY 541	54	40	15	109
	OFSY 577	53	33	13	99
	OFSY 528	45	29	6	80
	OFSY 500	44	29	6	79
	OFSY 501	43	24	6	73
	HLTH 605	25	21	24	70
	COMM 614	40	22	6	68
	COMP 628	40	20	7	67
	OFSY 599	39	23	4	66
	HMDV 626	30	32	4	66
	OFSY 516	38	12	15	65
	OFSY 510	39	23	2	64

Table 24. CTE Enrollments by Modality

	Modality	2018-19	2019-20	2020-21	18-19 to 20-21 Diff.	18-19 to 20-21 % Change
City College/ECC	Online	7,566	8,659	16,562	8,996	119%
	On-campus	11,313	10,183	378	-10,935	-97%
Mesa College	Online	11,562	13,905	23,868	12,306	106%
	On-campus	15,171	12,598	1,206	-13,965	-92%
Miramar College	Online	9,111	10,003	15,949	6,838	75%
	On-campus	19,231	14,677	5,668	-13,563	-71%
All Credit Colleges	Online	28,239	32,567	56,379	28,140	100%
	On-campus	45,715	37,458	7,252	-38,463	-84%

Table 25. CTE Success Rates, by Ethnicity, by College

		2018-19	2019-20	2020-21	18-19 to 20-21 Diff.
City College/ECC	African American	67%	67%	69%	2%
	Asian	84%	80%	87%	3%
	Filipino	81%	73%	78%	-3%
	Latinx	73%	70%	72%	-1%
	Multi-Ethnicity	77%	73%	73%	-4%
	Native American	84%	67%	68%	-16%
	Pacific Islander	78%	75%	68%	-10%
	Unknown	75%	65%	74%	-1%
	White	81%	78%	81%	0%
	Overall	76%	73%	76%	0%
Mesa College	African American	61%	68%	70%	9%
	Asian	83%	86%	89%	6%
	Filipino	78%	83%	85%	7%
	Latinx	72%	72%	73%	1%
	Multi-Ethnicity	75%	76%	76%	1%
	Native American	79%	86%	74%	-5%
	Pacific Islander	76%	78%	81%	5%
	Unknown	81%	77%	79%	-2%
	White	79%	80%	83%	4%
	Overall	76%	77%	79%	3%
Miramar College	African American	75%	73%	75%	0%
	Asian	88%	86%	89%	1%
	Filipino	84%	80%	84%	0%
	Latinx	81%	79%	79%	-2%
	Multi-Ethnicity	81%	80%	80%	-1%
	Native American	87%	81%	82%	-5%
	Pacific Islander	85%	76%	85%	0%
	Unknown	91%	87%	81%	-10%
	White	88%	87%	88%	0%
	Overall	85%	83%	84%	-1%

Table 26. Spring CTE Success Rates for Male students, by Ethnicity and College

		2019	2020	2021	Spr. 19 to Spr. 20 Diff.
City College/ ECC	African American	58%	61%	61%	3%
	Asian	84%	69%	83%	-15%
	Filipino	76%	73%	84%	-3%
	Latinx	74%	63%	72%	-11%
	Multi-Ethnicity	72%	70%	70%	-2%
	Native American	95%	68%	58%	-27%
	Pacific Islander	75%	66%	85%	-9%
	Unknown	78%	56%	79%	-22%
	White	78%	70%	81%	-8%
	Total	75%	66%	75%	-9%
Mesa College	African American	57%	62%	69%	5%
	Asian	80%	80%	83%	0%
	Filipino	74%	79%	85%	5%
	Latinx	71%	68%	66%	-3%
	Multi-Ethnicity	73%	74%	76%	1%
	Native American	50%	90%	70%	40%
	Pacific Islander	58%	67%	78%	9%
	Unknown	66%	70%	81%	4%
	White	77%	75%	80%	-2%
	Total	73%	72%	75%	-1%
Miramar College	African American	78%	70%	72%	-8%
	Asian	88%	86%	87%	-2%
	Filipino	83%	78%	88%	-5%
	Latinx	84%	76%	83%	-8%
	Multi-Ethnicity	85%	75%	80%	-10%
	Native American	85%	88%	78%	3%
	Pacific Islander	93%	64%	92%	-29%
	Unknown	91%	81%	78%	-10%
	White	89%	83%	89%	-6%
	Total	87%	79%	85%	-8%

Table 27. Spring CTE Success Rates for Female Students, by Ethnicity and College

		2019	2020	2021	Spr. 19 to Spr. 20 Diff.
City College/ ECC	African American	74%	66%	70%	-8%
	Asian	85%	81%	89%	-4%
	Filipino	86%	74%	81%	-12%
	Latinx	74%	71%	72%	-3%
	Multi-Ethnicity	82%	72%	73%	-10%
	Native American	73%	74%	90%	1%
	Pacific Islander	72%	79%	58%	7%
	Unknown	72%	76%	75%	4%
	White	86%	79%	84%	-7%
	Total	79%	73%	77%	-6%
Mesa College	African American	62%	73%	73%	11%
	Asian	85%	89%	91%	4%
	Filipino	78%	84%	86%	6%
	Latinx	76%	75%	74%	-1%
	Multi-Ethnicity	82%	75%	78%	-7%
	Native American	83%	90%	100%	7%
	Pacific Islander	86%	81%	79%	-5%
	Unknown	81%	81%	85%	0%
	White	82%	84%	86%	2%
	Total	78%	80%	81%	2%
Miramar College	African American	71%	70%	74%	-1%
	Asian	90%	85%	90%	-5%
	Filipino	84%	76%	74%	-8%
	Latinx	76%	74%	74%	-2%
	Multi-Ethnicity	85%	81%	78%	-4%
	Native American	69%	67%	83%	-2%
	Pacific Islander	47%	53%	47%	6%
	Unknown	87%	80%	81%	-7%
	White	85%	83%	85%	-2%
	Total	82%	79%	80%	-3%

Table 28. Gaps in CTE Success Rates between the highest group (Asian) and other ethnicities

		2018-19	2019-20	2020-21
City College/ ECC	African American	-17%	-13%	-18%
	Latinx	-11%	-10%	-15%
	Multi-ethnicity	-7%	-7%	-14%
	Filipino	-3%	-7%	-9%
	Native American	0%	-13%	-19%
	Pacific Islander	-6%	-5%	-19%
Mesa College	African American	-22%	-18%	-19%
	Latinx	-11%	-14%	-16%
	Multi-ethnicity	-8%	-10%	-13%
	Filipino	-5%	-3%	-4%
	Native American	-4%	0%	-15%
	Pacific Islander	-7%	-8%	-8%
Miramar College	African American	-13%	-13%	-14%
	Latinx	-7%	-7%	-10%
	Multi-ethnicity	-7%	-6%	-9%
	Filipino	-4%	-6%	-5%
	Native American	-1%	-5%	-7%
	Pacific Islander	-3%	-10%	-4%



CTE Annual Report: 2018-19 to 2020-21

Part 2: Major, Awards, CTE 9+ Units

August 20, 2021

Context

This briefing provides a high level overview of CTE programs in the District for the academic years of 2019-19 to 2020-21 (includes Summer, Fall, and Spring) in regards to CTE Major, and for the years of 2018-19 to 2020-21 for CTE Awards, CTE Award Earners, completion of 9+ CTE Units, and the CTE Employment Outcomes Survey. This briefing is Part 2 of 2 of the CTE Report. Part 1 included Section, Headcount, and Outcomes data.

Findings

Major (students at credit colleges only)

- There were just over 21,000 CTE major students enrolled across the credit colleges in 2019-20 and 2020-21 (35% to 38% of all students). The count of CTE major students remained relatively stable (-1%) over that time, compared to a 15% decrease in non-CTE majors (**Section 1**).
- Overall CTE major students were less likely to be female and tended to be older than non-CTE major students (**Section 3**). While this is the trend across all CTE major students, there are strong, different patterns by gender, ethnicity, and age in some CTE programs (**Section 4**).
- The top CTE majors demonstrated strong representation patterns by gender: Fire Technology, Computer Information Sciences, and Administration of Justice majors were highly male dominated, and Child Development students were nearly all female (**Section 4**).

Awards

- CTE awards at the credit colleges have decreased 22% since 2018-19, and increased 63% at the College of Continuing Education. The decrease at the credit colleges was driven by a decrease in CTE Certificates, particularly in programs traditionally reliant on on-campus instruction such as Cosmetology, Aviation Maintenance, and Dental Assisting (**Section 5**).
- In 2020-21, 43% of awards at the credit colleges were in CTE, and 78% of awards at the College of Continuing Education were in CTE (**Section 6**). The proportion of CTE awards at the credit colleges has decreased since 2018-19 as certificates in programs traditionally reliant on on-campus instruction have seen sharp decreases.

Completion of 9+ CTE Units (*Section 9*)

- Several groups were disproportionately impacted in earning 9+ CTE Units in some years: African American and Native American students in 2020-21, non-Binary students in 2019-20 and 2020-21, and younger (18-24) and the oldest (50+) students.

Employment Outcomes Survey (*Sections 10 and 11*)

- Three-quarters of CTE students from SDCCD were employed after they stopped enrolling or completed a program from 2018 to 2020. Between 63% and 73% of students had an occupation related to their field of study. COVID-19 likely contributed to a 6% to 11% decrease in employment in 2020 compared to 2019.

Metrics and Definitions

- **CTE Major:** A student enrolled at City, Mesa, or Miramar College with a Current Academic Plan on file in the academic year with a CIP code connected to a TOP code aligned to the Student Success Metrics definition of Career Technical Education. College-level headcounts of CTE major students are determined by the college at which the student's academic plan is on file.
- **CTE Award:** A state-supported degree or certificate with a TOP code aligned to the Student Success Metrics definition of Career Technical Education. Includes Bachelor's and Associate degrees; high school diplomas and Certificates of Course Completion awarded by the College of Continuing Education; and credit certificates from 8 to 16, 16 to 30, 18 to 30, 30 to 60, and 60 or more units. Excludes Certificates of Program Completion from the College of Continuing Education, which were introduced in the 2019-20 academic year.
- **CTE Award Earner:** A student who earned a state-supported degree or certificate with a TOP code aligned to the Student Success Metrics definition of Career Technical Education. Excludes those who earned only credit certificates from 8 to 16 units, 12 to 18 units, 16 to 30 units, and 18 to 30 units, and those who earned Certificates of Program Completion from the College of Continuing Education.
- **CE Certificate of Completion:** Includes Certificates of Completion and High School Diplomas awarded by the College of Continuing Education.

Exclusions

- Awards data excludes non-state supported awards.
- Awards data excludes 1,312 Certificates of Program Completion (91% of which were CTE) from the College of Continuing Education in 2019-20, and 1,542 in 2020-21 (97% CTE); this data was unavailable in 2018-19.

Additional Notes

- Headcount disaggregations for non-binary students became available in 2019-20 as the district transitioned to Campus Solutions; this data was not available in 2018-19.
- This report shows an increase in Certificates of Course Completion awarded by the College of Continuing Education from 2018-19 to 2019-20. During this period, the College of Continuing Education began to transition to a managed enrollment strategy rather than open-entry/open-exit. The effects of this strategy transition were somewhat accelerated by the COVID-19 pandemic and the districtwide adoption of Campus Solutions; these circumstances led to increased use of electronic systems to report and track certificates.

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CTE Majors at the Credit Colleges

- Credit Colleges Headcount by CTE Major:** There were over 21,000 students enrolled across the credit colleges with a CTE major in both 2019-20 and 2020-21; this was between 35% and 38% of all students enrolled at the credit colleges.

While the count of CTE major students enrolled across the colleges remained stable from 2019-20 to 2020-21 (-1%), the count of non-CTE major students decreased 15% over that period. **This led to an increase in the proportion of students with a CTE major, from 35% in 2019-20 to 38% in 2020-21.**

Of students with a CTE major (21,508 in 2019-20 and 21,282 in 2020-21), almost three-quarters enrolled in a CTE course each year at City, Mesa, or Miramar Colleges (2019-20: 73%, 2020-21: 72%). Just over one-third of students with a non-CTE major enrolled in CTE courses.

Figure 1. Headcount by Major Type, Credit Colleges

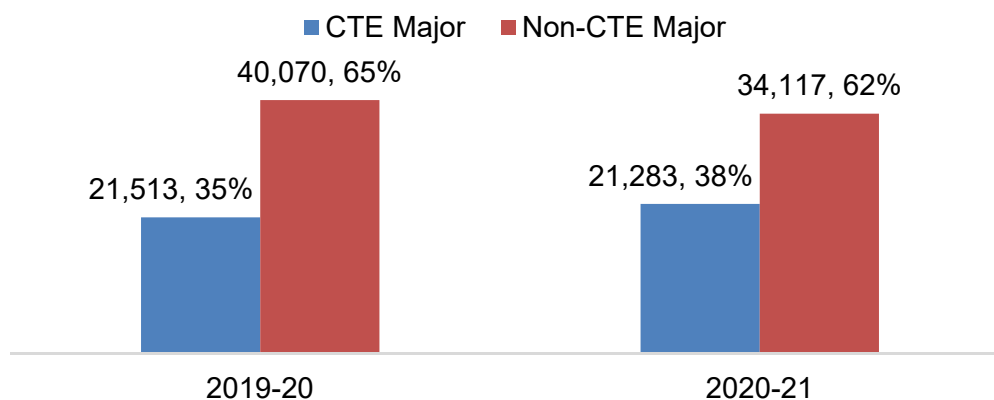


Table 1. Credit Colleges Headcount of Students who Enrolled in CTE courses, by Major Type

		2019-20	2020-21	Difference	% Change
CTE Major	Enrolled in CTE	15,672	15,416	-256	-2%
	Did not enroll in CTE	5,841	5,867	26	0%
	Total	21,513	21,283	-230	-1%
Non-CTE Major	Enrolled in CTE	14,781	12,730	-2,051	-14%
	Did not enroll in CTE	25,289	21,387	-3,902	-15%
	Total	40,070	34,117	-5,953	-15%

Table 2. Credit Colleges Proportion of Students who Enrolled in CTE courses, by Major Type

		2019-20	2020-21	Difference
CTE Major	Enrolled in CTE	73%	72%	0%
	Did not enroll in CTE	27%	28%	0%
	Total	100%	100%	---
Non-CTE Major	Enrolled in CTE	37%	37%	0%
	Did not enroll in CTE	63%	63%	0%
	Total	100%	100%	---

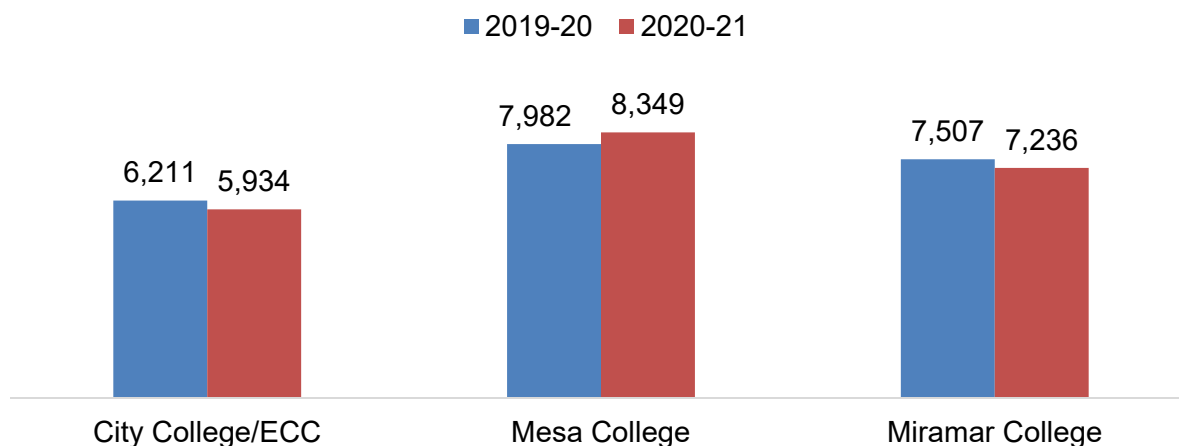
2. CTE Major Students, by Credit College: Between 5,900 and 8,300 students had CTE academic plans (majors) on file at each of the credit colleges in 2019-20 and 2020-21, accounting for between 31% and 44% of the student population.

Mesa College had the largest population of students with a CTE major in both academic years (7,982 in 2019-20 and 8,349 in 2020-21), and City College had the smallest.

As City and Miramar Colleges, the count of CTE decreased more slowly (City/ECC: -4%, Miramar: -4%) than the count of non-CTE students (City/ECC: -16%, Miramar: -13%), and at Mesa College the count of CTE students increased slightly (+5%) as the count of non-CTE students decreased (-15%). This led to a larger proportion of students with CTE majors at the colleges in 2020-21 than in 2020-21. See Table 4 on the next page for more detail.

Between 65% and 81% of students with CTE majors enrolled in CTE courses at City, Mesa, or Miramar College. A higher proportion of Miramar College students enrolled in CTE courses (81% in both years), followed by Mesa College (2019-20: 69%, 2020-21: 70%) and City College (2019-20: 68%, 2020-21: 65%). For more detail see Table 19 in the appendix.

Figure 2. Headcount and Proportion of Students with a CTE Academic Plan, by Credit College



Note. Students are included in the credit college at which they had an active academic plan on file in the given academic year.

Table 3. Proportion of all students with CTE Majors, by Credit College

	2019-20		2020-21	
	CTE Major Headcount	% of Total	CTE Major Headcount	% of Total
City College/ECC	6,211	35%	5,934	38%
Mesa College	7,982	31%	8,349	36%
Miramar College	7,507	41%	7,236	44%

Table 4. Credit College Headcount of Students by Major Type who Enrolled in CTE Courses

			2019-20	2020-21	Difference	% Change
City College/ ECC	CTE Major	Enrolled in CTE	4,237	3,886	-351	-8%
		Did not enroll in CTE	1,974	2,048	74	4%
		Total CTE Major	6,211	5,934	-277	-4%
	Non-CTE Major	Enrolled in CTE	4,297	3,694	-603	-14%
		Did not enroll in CTE	7,412	6,119	-1,293	-17%
		Total non-CTE Major	11,709	9,813	-1,896	-16%
	Total Credit College		17,920	15,747	-2,173	-12%
Mesa College	CTE Major	Enrolled in CTE	5,519	5,839	320	6%
		Did not enroll in CTE	2,463	2,510	47	2%
		Total CTE Major	7,982	8,349	367	5%
	Non-CTE Major	Enrolled in CTE	6,083	5,271	-812	-13%
		Did not enroll in CTE	11,480	9,688	-1,792	-16%
		Total non-CTE Major	17,563	14,959	-2,604	-15%
	Total Credit College		25,545	23,308	-2,237	-9%
Miramar College	CTE Major	Enrolled in CTE	6,073	5,837	-236	-4%
		Did not enroll in CTE	1,434	1,399	-35	-2%
		Total CTE Major	7,507	7,236	-271	-4%
	Non-CTE Major	Enrolled in CTE	4,539	3,897	-642	-14%
		Did not enroll in CTE	6,062	5,351	-711	-12%
		Total non-CTE Major	10,601	9,248	-1,353	-13%
	Total Credit College		18,108	16,484	-1,624	-9%

Note 1. Students are included in the credit college at which they had an active academic plan on file in the given academic year.

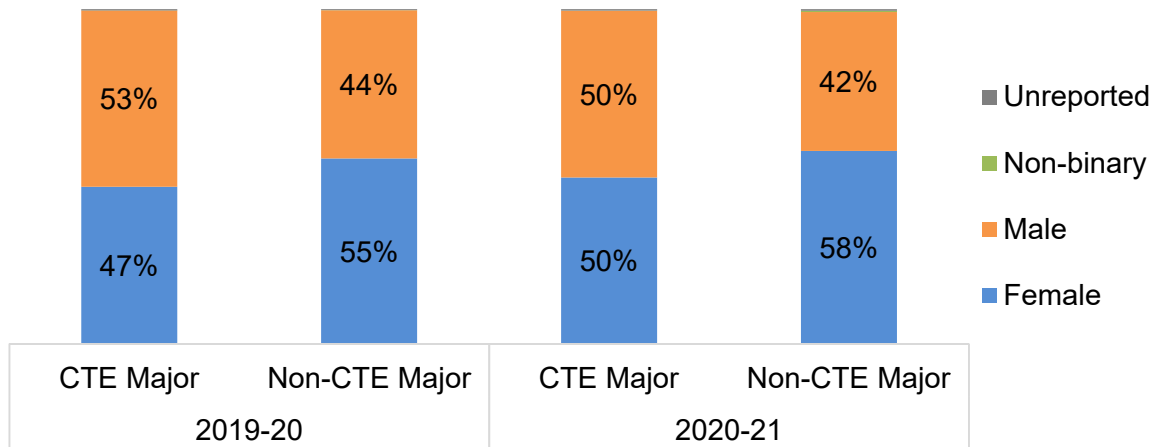
Note 2. Students are included in the "Enrolled in CTE" row if they enrolled a CTE course at any of the credit colleges or at the College of Continuing Education in the given academic year.

3. Credit Colleges CTE Major Students, Demographics: Compared to students with a non-CTE major, CTE-major students are less likely to be female and more likely to be older.

This analysis only includes students at the credit colleges.

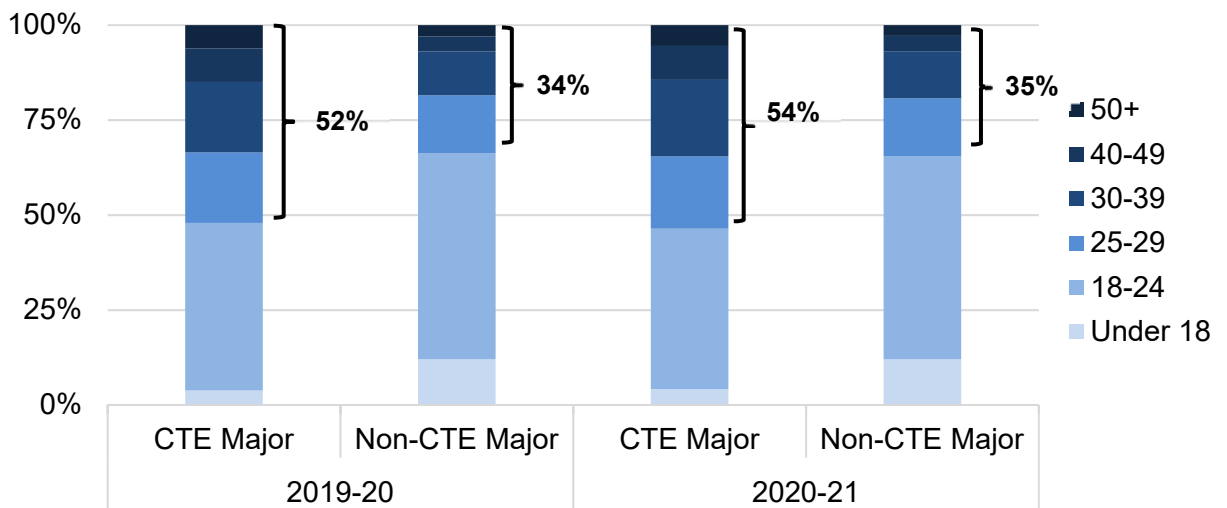
CTE-major students less likely to be female: Female students accounted for a smaller proportion of CTE major students than of non-CTE major students in both 2019-20 and 2020-21 (-8% in both years).

Figure 3. CTE Major and non-CTE Major students, by Gender, Credit Colleges



CTE-major students tend to be older: Students 25 and older accounted for more than half of CTE-major students, compared to just over a third of non-CTE major students, in both 2019-20 and 2020-21.

Figure 4. CTE Major and non-CTE Major students, by Age Group, Credit Colleges



CTE-major students were similar by ethnicity to non-CTE major students, except that they were slightly less likely to be Asian (-2% in 2019-20 and 2020-21) and more likely to be white (+4% in 2019-20 and 2020-21). See Table 18 in the appendix for more detail.

3. Credit Colleges Top Majors, Overall: Business Administration and Business Administration for Transfer were the most popular CTE majors across 2019-20 and 2020-21. Three different Administration of Justice majors were included in the top 10 CTE majors in both 2019-20 and 2020-21.

COVID-19 impacted the number of students selecting Cosmetology as a major: 208 fewer students enrolled at the colleges had this major in 2020-21 than in 2019-20, a decrease of 46%.

There were 269 more students with an Administration of Justice, Law Enforcement Specialization major in 2020-21 than in 2019-20, an increase of 42%. This increase may be part of a shift away from two other Administration of Justice majors, which saw a combined decrease of 281 students from 2019-20 to 2020-21.

Table 5. Top 10 CTE Majors at the Credit Colleges in 2019-20 and 2020-21

	2019-20	2020-21	Difference	% Change
Business Administration for Transfer	2,784	2,665	-119	-4%
Business Administration	1,620	1,319	-301	-19%
Child Development	951	838	-113	-12%
Computer and Information Sciences	810	813	3	0%
Fire Technology	743	540	-203	-27%
Admin. of Justice Law Enforcement	662	477	-185	-28%
Admin. of Justice Law Enforcement Spec.	646	915	269	42%
Administration of Justice for Transfer	539	443	-96	-18%
Nursing Education Registered Nurse	473	733	260	55%
Cosmetology	458	250	-208	-45%
Business Management	457	629	172	38%

Nearly all Administration of Justice and Fire Protection students enrolled in CTE courses in either 2019-20 or 2020-21. On the other hand, only 30% of Nursing students enrolled in CTE courses, even as the number of students in that major increased 55%.

Table 6. Percent of Top CTE Major Students who Enrolled in CTE Courses

	2019-20	2020-21
Business Administration for Transfer	69%	71%
Business Administration	60%	65%
Child Development	75%	75%
Computer and Information Sciences	54%	57%
Fire Technology	93%	91%
Admin. of Justice Law Enforcement	95%	97%
Admin. of Justice Law Enforcement Spec.	98%	98%
Administration of Justice for Transfer	78%	77%
Nursing Education Registered Nurse	30%	30%
Cosmetology	80%	67%
Business Management	68%	68%

There were **260 more Nursing students in 2020-21** than the prior year.

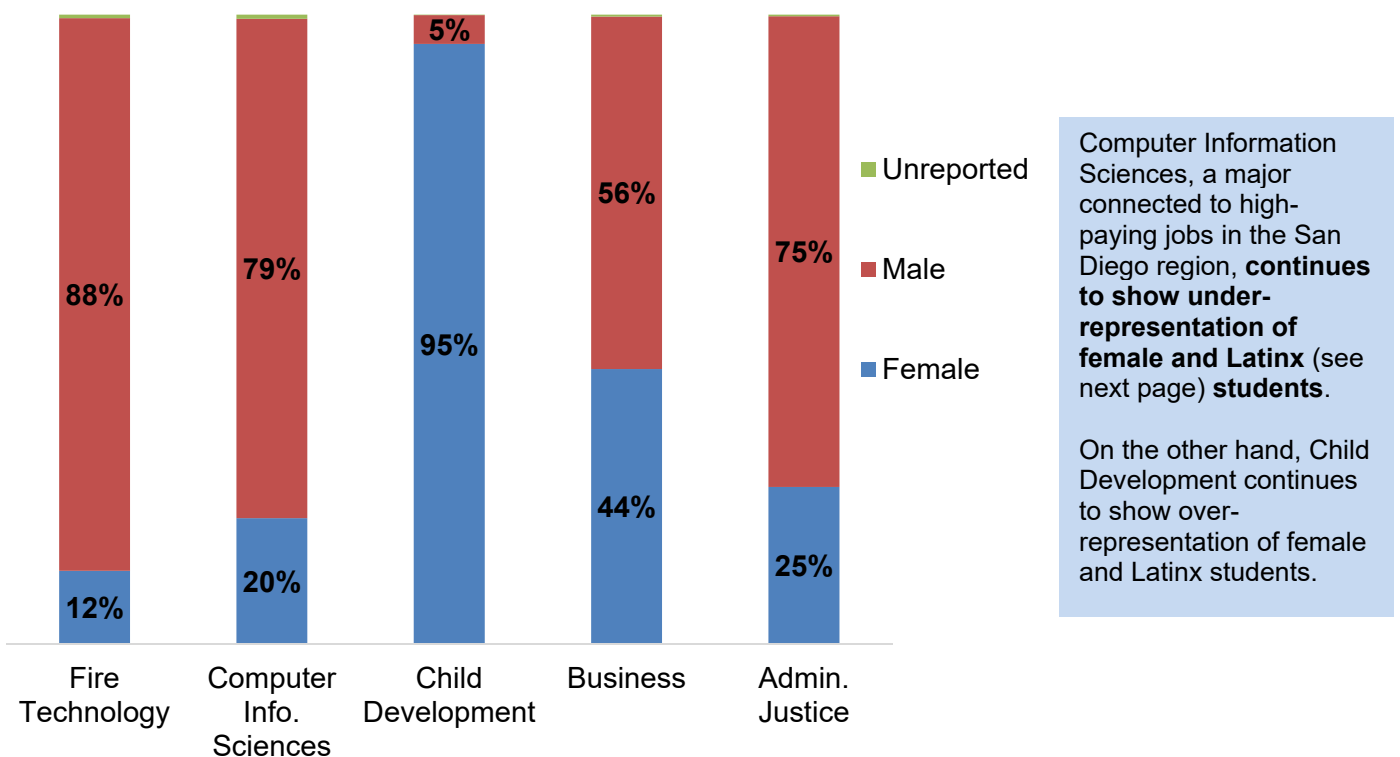
However, **only 30% of Nursing students enrolled in CTE courses** in 2019-20 and 2020-21.

4. **Credit Colleges Top 5 Major Groups, Demographics:** There were strong trends among CTE major by gender, and moderately strong trends by ethnicity. Female students were highly under-represented in Computer Sciences and Public Safety (Admin. Justice and Fire Technology), while male students were very highly under-represented in Child Development. Public Safety major students were more likely to be white.

The most popular majors were grouped by subject area to simplify analysis (i.e., “Business” refers to Business Administration for Transfer, Business Administration, and Business Management). See Table 22 in the Appendix for full grouping detail.

Trends by Gender: The most popular CTE majors reflect entrenched gender representation trends in occupations related to those majors. Majors aligned to traditionally male-dominated professions (Fire Technology, Computer Science, and Administration of Justice) had strong over-representation of male students at the colleges. On the other hand, nearly all Child Development major students are female.

Figure 5. Top CTE Major Groups at the Credit Colleges, by Gender, unduplicated across 2019-20 and 2020-21

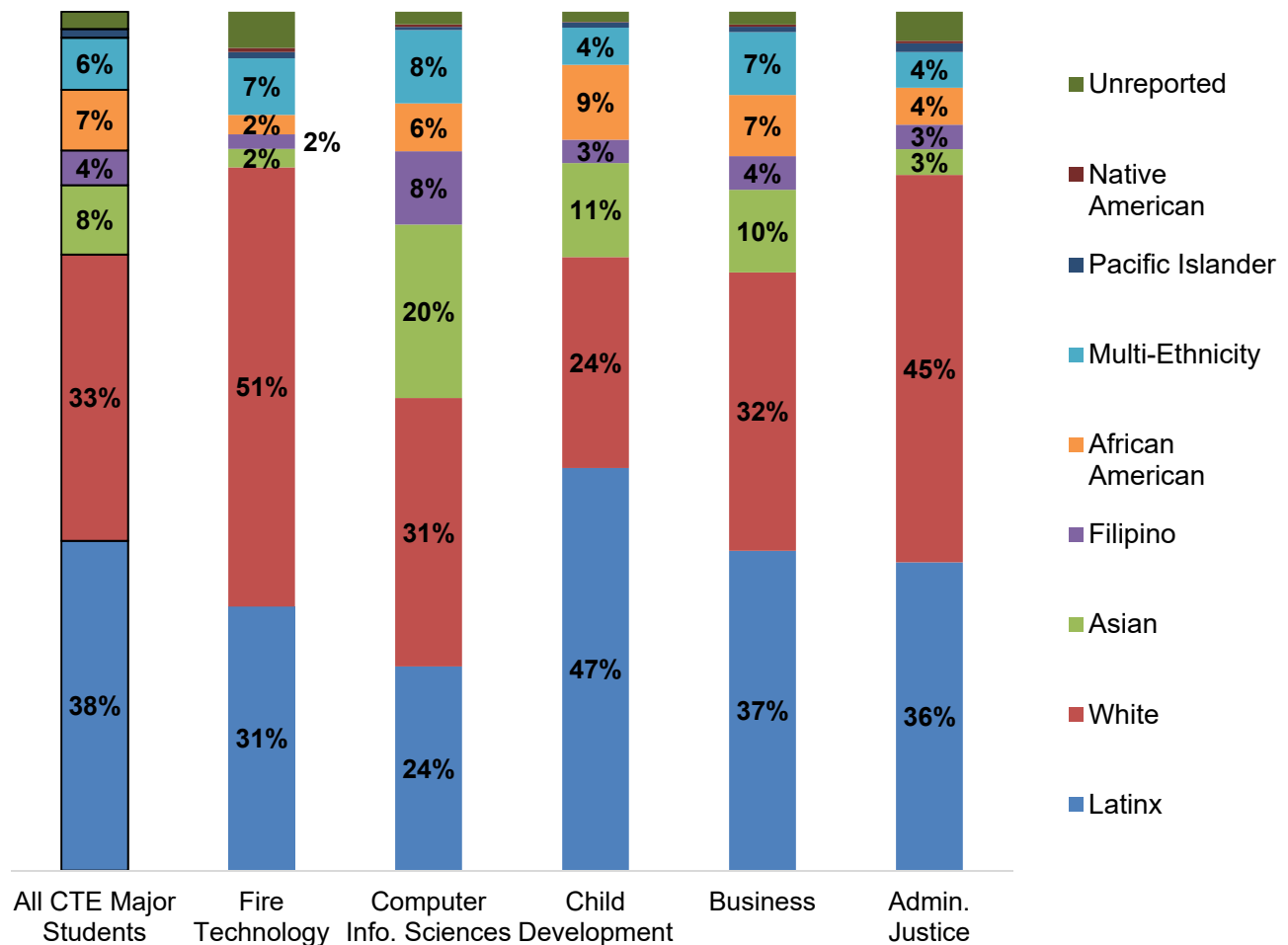


Note. Non-binary students were not represented among these majors.

Trends by Ethnicity: Compared to all CTE-major students:

- Fire Technology and Administration of Justice students were **much more likely to be white** (+18% and +12%)
- Child Development students were **more likely to be Latinx** (+9%).
- Computer Information Sciences students were **much more likely to be Asian** (+12%). **Latinx students were highly under-represented** among Computer Information Sciences major students (-14% compared to representation of all CTE major students).

Figure 6. Top CTE Major Groups, by Ethnicity, unduplicated across 2019-20 and 2020-21



CTE Completion

- 5. CTE Awards Decreases due to COVID-19: In 2020-21, the credit colleges conferred 2,180 CTE awards and the College of Continuing Education conferred 10,382 CTE certificates. CTE awards at the credit colleges have decreased 22% since 2018-19, and increased 63% at the College of Continuing Education.**

COVID-19 impacted award completion in 2019-20: There was a significant decrease in overall awards conferred in 2019-20 by the Credit Colleges, from 5,348 the prior year to 4,605 (-14%). The decrease in awards from 2018-19 to 2019-20 was largely accounted for by CTE awards, which decreased 29% from the prior year (City/ECC: -31%, Mesa: -21%, Miramar: -35%), while non-CTE awards increased at City and Mesa (+10% and +5%) and decreased slightly at Miramar (-6%).

In 2020-21, CTE awards recovered somewhat at the credit colleges compared to 2019-20 (+210 awards, +10%), although CTE awards in 2020-21 were still 22% lower than in 2018-19.

It should be noted that more Associate degrees while were awarded in 2020-21 than in 2018-19, credit Certificates were still significantly lower. See Table 8 on the next page for more information.

Table 7. 2018-19 Awards by CTE/non-CTE

		2018-19	2019-20	2020-21	Diff. 18-19 to 20-21	% Change 18-19 to 20-21
City College/ECC	CTE	762	524	520	-242	-32%
	Non-CTE	708	782	810	102	14%
	Total	1,470	1,306	1,330	-140	-10%
Mesa College	CTE	933	737	838	-95	-10%
	Non-CTE	1,068	1,119	1,144	76	7%
	Total	2,001	1,856	1,982	-19	-1%
Miramar College	CTE	1,092	709	822	-270	-25%
	Non-CTE	785	734	897	112	14%
	Total	1,877	1,443	1,719	-158	-8%
Credit Colleges Total	CTE	2,787	1,970	2,180	-607	-22%
	Non-CTE	2,561	2,635	2,851	290	11%
	Total	5,348	4,605	5,031	-317	-6%
College of Continuing Education	CTE	6,388	8,186	10,382	3,994	63%
	Non-CTE	2,500	3,656	2,858	358	14%
	Total	8,888	11,842	13,240	4,352	49%
District	CTE	9,175	10,156	12,562	3,387	37%
	Non-CTE	5,061	6,291	5,709	648	13%
	Total	14,236	16,447	18,271	4,035	28%

Note. The table above excludes 1,312 Certificates of Program Completion (91% of which were CTE) from the College of Continuing Education in 2019-20, and 1,542 in 2020-21 (97% CTE); this data was unavailable in 2018-19.

CTE 30-59 Unit Certificates were impacted significantly by the COVID-19 pandemic. They decreased from 450 in 2018-19 to 158 in 2019-20. This is likely due to the nature of courses required for these certificates: the top 30-59 Unit CTE Certificate in 2018-19 was in Cosmetology, for which 62 fewer certificates were awarded in 2019-20 compared to 2018-19 (75 certificates in 2018-19, 13 in 2019-20). Other 30-59 unit certificates that saw large decreases included Visual & Performing Art/Graphic Design and Aviation Maintenance (see Table 9).

On the other hand, non-CTE 30-59 Unit Certificates increased from 2018-19 to 2019-20, as many more students were awarded certificates in CSU General Education and Intersegmental General Education Transfer (222 in 2018-19, 639 in 2019-20, and 737 in 2020-21).

COVID-19 led to a **sharp decrease** in students receiving CTE 30-59 Unit Certificates, with programs such as Cosmetology, Aviation Maintenance, and Dental Assisting seeing large decreases.

Over the same period, the number of students receiving non-CTE 30-59 unit certificates in General Education increased dramatically.

Table 8. Districtwide Awards, by CTE/non-CTE and Degree Type

	2018-19		2019-20		2020-21	
	CTE	Non-CTE	CTE	Non-CTE	CTE	Non-CTE
Bachelor's Degree	15	---	28	---	27	---
AA/AS	814	1,297	839	1,029	950	1,155
AD-T	632	997	590	951	667	950
Certificate 60+	54	---	31	---	16	---
Certificate 30-59	450	262	158	652	192	741
Certificate 8 or 16*	822	5	324	3	328	5
CE Certificate of Completion	6,388	2,500	8,186	3,656	10,382	2,858
Total	9,175	5,061	10,156	6,291	12,562	5,709
% of Awards in Year	64%	36%	62%	38%	69%	31%

Note 1. CCCC supported certificates changed criteria in 2019-20. The "Certificate 8 or 16" row includes 8 and 16 units certificates in 2019-20 and 2020-21, and 12 or 18 unit certificates in 2018-19.

Note 2. Excludes non-state supported awards.

Table 9. Top 10 30-59 Unit CTE Certificates in 2018-19, with 2019-20 and 2020-21 Counts

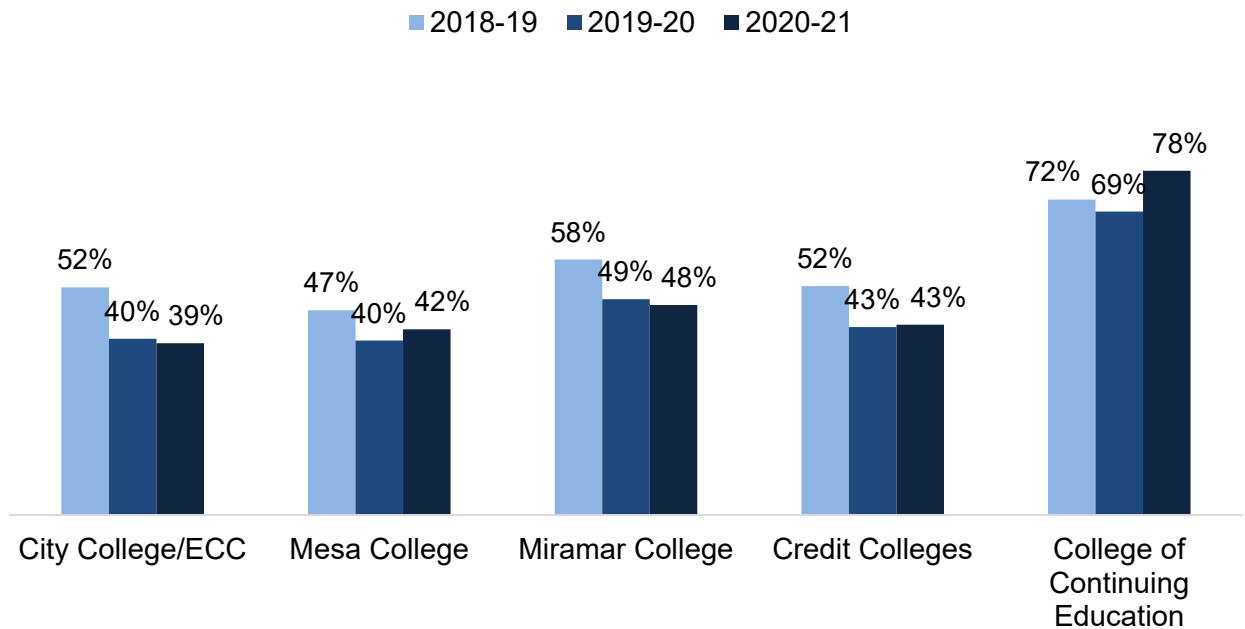
Award Description	2018-19	2019-20	2020-21	Decrease 2018-19 to 2019-20
Cosmetology	75	13	7	-83%
Paralegal	34	21	40	-38%
Behavioral Sci-Alcohol & Drug	31	18	18	-42%
Vis & Perf Art-Art Graphic Design	25	2	6	-92%
Aviation Maint Tech-Powerplant	22	7	7	-68%
Aviation Maint Tech-Airframe	21	7	7	-67%
Dental Assisting	20	5	22	-75%
Business Administration	18	1	6	-94%
Culinary Arts/Mgt-Hospitality	17	2	6	-88%
Fire Technology	16	3	1	-81%

6. CTE Awards % of all awards: Districtwide, 69% of awards were CTE (Credit Colleges: 43%, Continuing Education: 78%). As total CTE awards decreased at the colleges from 2018-19 to 2020-21, so has the proportion of total awards that are CTE.

Miramar College awarded a higher proportion of CTE awards in 2020-21 (48%) compared to City College (39%) and Mesa College (42%).

As the College of Continuing Education has increased total awards since 2018-19, the number of CTE awards has increased 63% while non-CTE awards increased 14% (see Table 7). This has led to an increase in the proportion of all awards that are CTE, from 72% in 2018-19 to 78% in 2020-21.

Figure 7. Percent of All Awards that are CTE

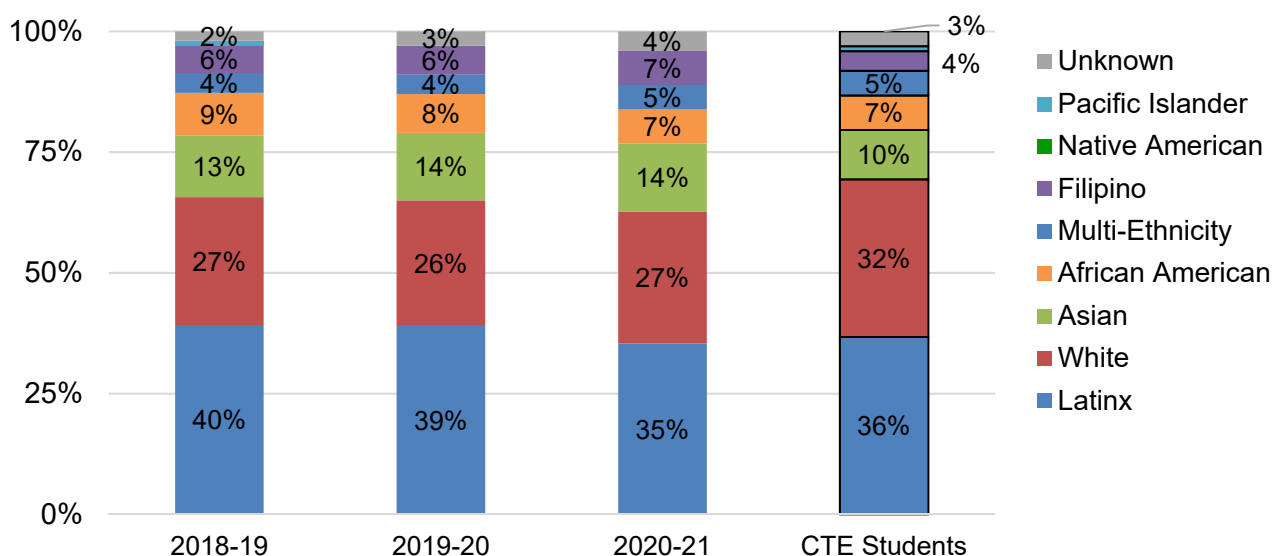


7. CTE Awards Earner Demographics: Compared to all students enrolled in CTE courses, students who earned CTE awards were more likely to be Asian and less likely to be white, more likely to be female, and more likely to be 30 or older.

Award Earner Gaps by Ethnicity: Compared to enrolled in CTE courses, award earners were more likely to be Asian (+3% to +4%) from 2018-19 to 2020-21. CTE award earners were also less likely to be white (-5% to -6%). It should be noted that representation of Latinx students among award earners decreased 5% from 2018-19 to 2020-21.

6,127 students earned CTE awards districtwide in 2020-21, an increase of 22% from 2018-19. The count of Asian, Filipino, and Multi-ethnicity students earning awards increased at higher rates (+33%, +54%, and +47%), the count of Latinx and Native American students increased at lower rates (+9% and +14%), and count of African American and Pacific Islander students decreased (-5% and -23%). See Table 10 on the next page for more detail.

Figure 8. Ethnicity of CTE Award Earners, Districtwide, 2018-19 to 2020-21



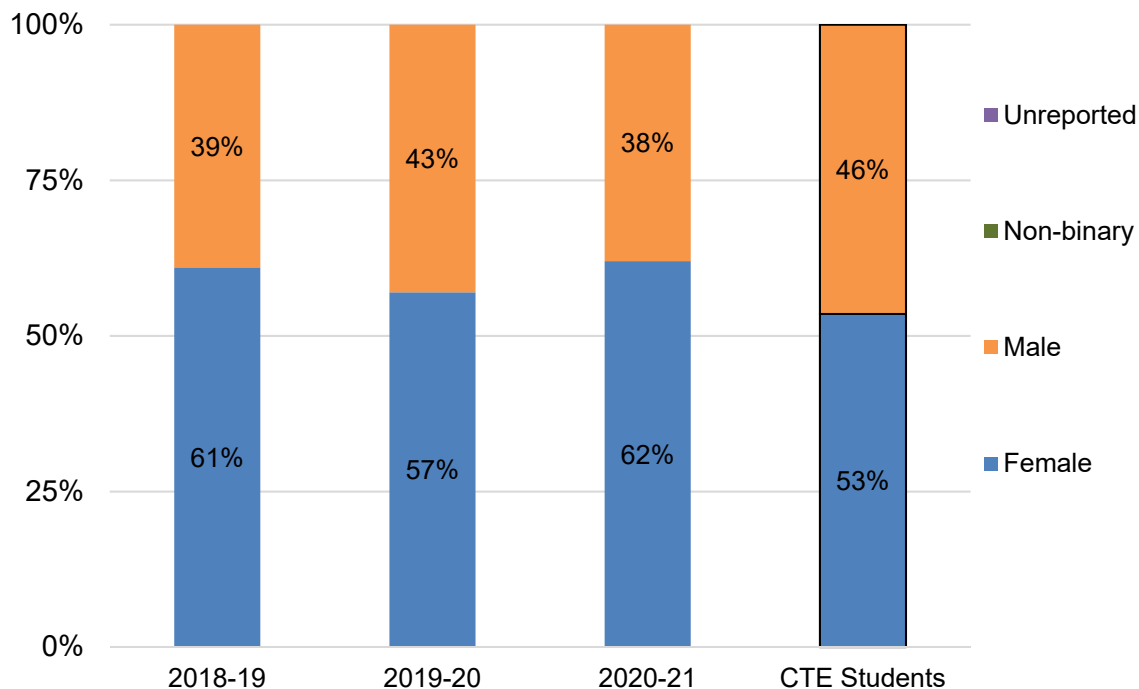
Note. CTE Students is all CTE-enrolled students, unduplicated across 2018-19 to 2020-21.

Table 10. CTE Award Earner Counts, 2018-19 to 2020-21

	2018-19	2019-20	2020-21	Diff. 18-19 to 20-21	% Change 18-19 to 19-20
African American	429	470	407	-22	-5%
Asian	645	870	861	216	33%
Filipino	288	379	444	156	54%
Latinx	1,979	2,436	2,155	176	9%
Multi-Ethnicity	190	249	280	90	47%
Native American	14	17	16	2	14%
Pacific Islander	31	23	24	-7	-23%
Unknown	93	196	267	174	187%
White	1,339	1,602	1,673	334	25%
Total	5,008	6,242	6,127	1,119	22%

Award Earner Gaps by Gender: Compared to students enrolled in CTE courses, award earners were more likely to be female (+4% to +9%) from 2018-19 to 2020-21.

Figure 9. Gender of CTE Award Earners, 2018-19 to 2020-21



Note. CTE Students is all CTE-enrolled students, unduplicated across 2018-19 to 2020-21.

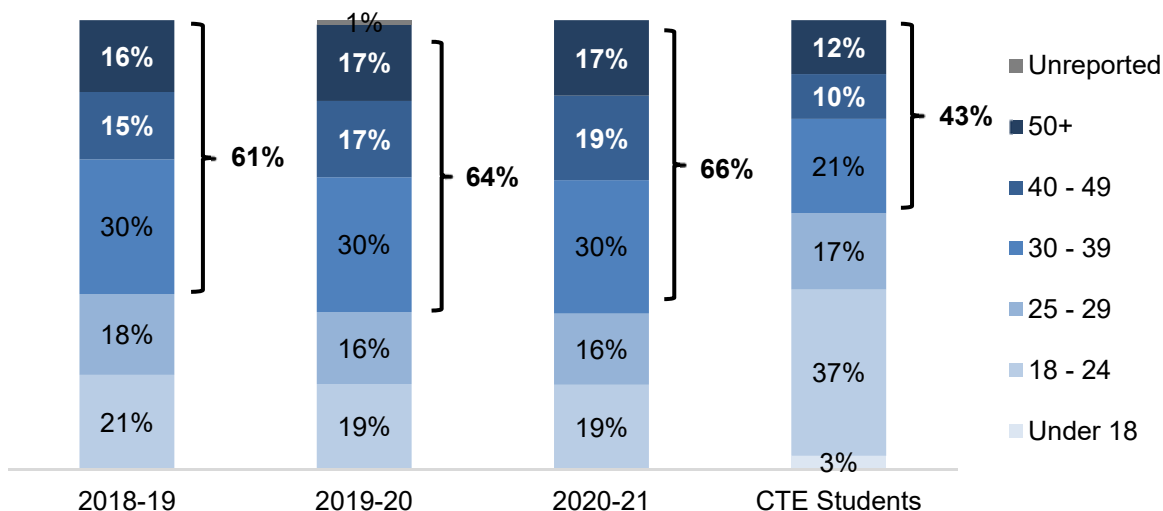
Table 11. CTE Award Earner Counts, 2018-19 to 2020-21

	2018-19	2019-20	2020-21	Diff. 18-19 to 20-21	% Change 18-19 to 20-21
Female	3,047	3,531	3,805	758	25%
Male	1,961	2,698	2,305	344	18%
Non-Binary	n/a	1	0	n/a	n/a
Unreported	0	12	17	17	---
Total	5,008	6,242	6,127	1,119	22%

Award Earner Gaps by Age Group: Compared to students enrolled in CTE courses, award earners were more likely to be 30 years or older (+18% to +23%).

While the count of CTE award earners under 30 grew moderately (18-24: +8%, 25-29: +5%), the count of award earners 30 or over increased significantly (+25% to +48%).

Figure 10. Age Group of CTE Award Earners, 2018-19 to 2020-21



Note. CTE Students is all CTE-enrolled students, unduplicated across 2018-19 to 2020-21.

Table 12. Count of CTE Award Earners, by Age Group

	2018-19	2019-20	2020-21	Diff. 18-19 to 20-21	% Change 18-19 to 20-21
Under 18	0	7	2	2	---
18-24	1,048	1,188	1,136	88	8%
25-29	904	972	952	48	5%
30-39	1,478	1,847	1,852	374	25%
40-49	772	1,069	1,142	370	48%
50+	806	1,092	1,025	219	27%
Unreported	0	67	18	18	---
Total	5,008	6,242	6,127	1,119	22%

8. CTE Award Earner Gaps, Credit and non-Credit: Demographics differ significantly between credit and non-credit institutions, and credit and non-credit award earners showed different gaps compared to CTE students at each institution.

There were 2.5 more CTE award earners from the College of Continuing Education than from the credit colleges in 2019-20, and 3 times more in 2020-21. The below paragraphs summarize gaps in award earners from CTE students at the credit colleges and the College of Continuing Education separately, from 2019-20 to 2020-21.

Credit Award Earner Gaps: Compared to all credit CTE students in 2019-20 and 2020-21, CTE award earners from the credit colleges were more likely to be Asian and Filipino (2% to 3%), and less likely to be Latinx (2% to 4%) and white (2% to 3%). Credit CTE Award earners were also more likely to be female (7%), and less likely to be 18-24 (-7% to -6%) compared to credit CTE students. See tables 19 to 21 in the Appendix for more detail.

Non-credit Award Earner Gaps: Compared to all non-credit CTE students in 2019-20 and 2020-21, CTE award earners from the College of Continuing Education were more likely to be Asian (2% to 3%) and less likely to be white (-2% to -4%) in both 2019-20 and 2020-21. Latinx students saw decreased representation in award earners from 2019-20 to 2020-21, from 41% of non-credit CTE award earners to 35%.

Non-credit CTE award earners were 2% to 4% more likely to be between the ages of 30 and 49 compared to all non-credit CTE students, and 6% less likely to be 50 or older. See tables 22 to 24 in the Appendix for detail.

Subsequent analysis of CTE awards should consider gaps between students and award earners by program. Because of large differences in the demographics of programs (i.e. Computer Information Sciences is heavily male-dominated, while Child Development is heavily female dominated), representation of award earners *by program* should be included in subsequent reporting on CTE outcomes.

9. Completion of 9+ CTE Units: Several groups were disproportionately impacted in earning 9+ CTE Units in some years: African American and Native American students in 2020-21, non-Binary students in 2019-20 and 2020-21, and younger (18-24) and the oldest (50+) students.

Disproportionate impact (DI) occurs when a group achieves a benchmark at a significantly lower rate than a reference group – usually the highest-achieving group. For this analysis, “significantly lower” was defined as instances where the rate at which one group earned 9+ CTE units was less than 80% of the rate at which the reference group earned 9+ CTE units.

Overall, 21% of CTE students earned 9+ CTE units in 2018-19, 2019-20, and 2020-21. The count of students achieving this benchmark decreased 11% across the last three years, from 6,721 in 2018-19 to 5,988 in 2020-21.

Table 13 below indicates instances in which groups achieved this benchmark at disproportionately lower rates than the reference group (the group which achieved the benchmark at the highest rate, excluding small groups). The reference group for each category is included with gray background and italics.

For example, 18% of African American CTE students earned 9+ CTE units in 2020-21. 23% of Asian students earned 9+ CTE units that year. The rate for African American students (18%) is 78% of the rate for Asian students (23%), so this is an instance of disproportionate impact.

Table 13. DI Groups and Years: Percent of CTE Students who earned 9+ CTE Units at Disproportionately Lower Rates than the Reference Group

Category	Group	Disproportionately impacted in		
		2018-19	2019-20	2020-21
Ethnicity	African American	---	---	18%
	Native American	---	---	17%
	<i>Asian</i>	22%	23%	23%
Gender	Non-Binary	n/a	11%	13%
	<i>Female</i>	22%	21%	21%
Age	18-24	19%	20%	---
	40-49	20%	21%	---
	50+	18%	19%	19%
	<i>25-29</i>	25%	26%	24%

Note 1. Gender data for non-binary students was not available in 2018-19.

Note 2. Students under 18 earned 9+ CTE units at less than 80% of the reference group in all years, but are excluded from the DI analysis.

Note 3. Includes enrollments at the credit colleges only. Excludes credit by exam.

CTE Employment Outcomes Survey

- 10. Employment Rate: On average, about three-quarters of CTE students from SDCCD were employed after they stopped enrolling or completed a program from 2018 to 2020. Between 63% and 73% of students had an occupation related to their field of study. COVID-19 likely contributed to a 6% to 11% decrease in employment in 2020 compared to 2019.**

Reported employment rates¹ in 2020 were between 70% and 78%, 6% to 11% lower than the prior year.

Students from SDCCD generally reported employment rates similar to or above the statewide average. COVID-19 may have impacted SDCCD CTE students more strongly than others across the state, as reported decreases in employment at SDCCD are larger than across the state (-5%).

Over the last three years, SDCCE students have reported lower rates of employment than students from the credit colleges (City/ECC: 82%, Mesa: 77%, Miramar: 84%, SDCCE: 73%).

Table 14. Employment Rate, former CTE Students

	2018	2019	2020	3-Year Average	2019-2020 Difference
City/ECC	84%	84%	78%	82%	-6%
Mesa	81%	78%	71%	77%	-7%
Miramar	85%	89%	78%	84%	-11%
SDCCE	73%	77%	70%	73%	-7%
Statewide	81%	82%	77%	80%	-5%

63% to 73% of respondents reported employment in a field related to their program of study. Across the last three years, respondents from Miramar College reported higher rates of employment in related fields (75%) than the state (71%), and College of Continuing Education respondents reported lower rates (63%).

Table 15. Employment Rate in Occupation Related to Field of Study

	2018	2019	2020	3-Year Average	2019-2020 Difference
City/ECC	73%	74%	71%	73%	-3%
Mesa	73%	71%	67%	70%	-4%
Miramar	75%	78%	73%	75%	-5%
SDCCE	61%	64%	66%	63%	2%
Statewide	70%	71%	71%	71%	0%

¹ Employment rate includes those Employed At One Job, Self-Employed, and Employed At More Than One Job in the year after the student stopped enrollment or completed a program.

11. Wage Growth and Program Satisfaction: Across the last three years, respondents at the Credit Colleges reported hourly wage gain of between 47% and 51%, similar to but marginally lower than the statewide average. Respondents from the College of Continuing Education reported lower hourly wage gain across the last three years (24%). Nearly all respondents were satisfied with the education or program of study.

Similar to trends observed in reported employment rates, the difference from 2019 to 2020 is larger at the credit colleges than the statewide average (City/ECC: -29%, Mesa: -12%, Miramar: -12%).

Among respondents from the credit colleges, this growth relates to hourly wage growth in dollars of between \$7.70 and \$8.59 across the last three years, similar to the statewide average (\$8.43). Students from the College of Continuing Education reported wage gains of \$4.58.

Table 16. Hourly Wage Growth, % Change, former CTE students, compared to Wages pre-CTE Coursework

	2018	2019	2020	3-Year Average	2019-2020 Difference
City/ECC	56%	63%	34%	51%	-29%
Mesa	38%	60%	48%	49%	-12%
Miramar	47%	53%	40%	47%	-12%
SDCCE	19%	26%	26%	24%	0%
Statewide	53%	56%	56%	55%	0%

Nine out of ten students were satisfied with the education they received at City, Mesa, and Miramar Colleges, and the College of Continuing Education.

Table 17. Percent of former CTE students Satisfied with CTE coursework

	2018	2019	2020	3-Year Average	2019-2020 Difference
City/ECC	91%	90%	91%	91%	1%
Mesa	94%	92%	93%	93%	1%
Miramar	96%	95%	96%	96%	1%
SDCCE	91%	93%	92%	92%	-1%
Statewide	91%	92%	92%	92%	0%

Talking Points

Report Finding	Discussion
<p>There was a large increase in the number of Nursing students from 2019-20 to 2020-21 (+45%). However, only 30% of Nursing students enrolled in CTE courses in each year (section #3).</p>	<p>The low rate of Nursing students in CTE courses suggests these students have many general education requirements to fulfill, or experience difficulty enrolling in courses required to complete their program.</p>
<p>Administration of Justice students are much more likely to be male and white, and more likely to be older, than CTE students. White students accounted for nearly half (45%) of Administration of Justice majors, and male students accounted for three quarters of the major (section #5).</p>	<p>As a key educator of future police officers and law enforcement professionals in the San Diego region, SDCCD should continue to explore and develop adoption of anti-racist pedagogies in Administration of Justice and similar courses, as well as explore outreach methods to increase diversity among this group of students.</p>
<p>Computer Information Sciences, a major connected to high-paying jobs in the San Diego region, continues to show under-representation of female and Latinx students. On the other hand, Child Development continues to show over-representation of female and Latinx students (section #5).</p>	<p>Increasing equitable access to career preparation pathways connected to high-wage, in-demand career pathways should remain a priority.</p>
<p>Completion of CTE Certificates was significantly impacted by the COVID-19 pandemic at the credit colleges in programs such as Cosmetology, Aviation Maintenance, and Dental Assisting.</p>	<p>Programs heavily reliant on on-campus instruction may benefit from additional support services to remove barriers to student completion.</p>
<p>African American, Native American, non-binary, and the oldest and youngest CTE students were disproportionately impacted in the rates at which they earned 9+ CTE units.</p>	<p>As the California Community Colleges move towards outcomes-based funding under the Student-Centered Funding Formula, increasing completion rates for all groups will become key to preserving funding in addition to furthering equity goals.</p>

Appendix

Table 18. CTE Major Students, by Ethnicity

	2019-20		2020-21	
	CTE Major	Non-CTE Major	CTE Major	Non-CTE Major
African American	7%	6%	7%	6%
Asian	9%	11%	9%	11%
Filipino	4%	5%	4%	5%
Latinx	38%	39%	39%	38%
Multi-Ethnicity	6%	7%	7%	7%
Native American	0%	0%	0%	0%
Pacific Islander	1%	0%	1%	0%
Unknown	3%	2%	2%	2%
White	32%	28%	33%	29%
Total	100%	100%	100%	100%

Students with a CTE major are less likely to be Asian and more likely to be white than non-CTE students.

Table 19. Proportion of CTE-major and non-CTE major students who Enrolled in CTE Courses

			2019-20	2020-21	Difference
City College/ ECC	CTE Major	Enrolled in CTE	68%	65%	-3%
		Did not enroll in CTE	32%	35%	3%
		Total	100%	100%	---
	Non-CTE Major	Enrolled in CTE	37%	38%	1%
		Did not enroll in CTE	63%	62%	-1%
		Total	100%	100%	---
Mesa College	CTE Major	Enrolled in CTE	69%	70%	1%
		Did not enroll in CTE	31%	30%	-1%
		Total	100%	100%	---
	Non-CTE Major	Enrolled in CTE	35%	35%	1%
		Did not enroll in CTE	65%	65%	-1%
		Total	100%	100%	---
Miramar College	CTE Major	Enrolled in CTE	81%	81%	0%
		Did not enroll in CTE	19%	19%	0%
		Total	100%	100%	---
	Non-CTE Major	Enrolled in CTE	43%	42%	-1%
		Did not enroll in CTE	57%	58%	1%
		Total	100%	100%	---

Note. Students are included in the "Enrolled in CTE" row if they enrolled a CTE course at any of the credit colleges or at the College of Continuing Education in the given academic year.

Table 20. Major Groupings by Subject, for Section 5

Major	Major Group
Business Administration for Transfer	Business
Business Administration	
Business Management	
Administration of Justice, Law Enforcement Specialization	Administration of Justice
Administration of Justice, Law Enforcement	
Administration of Justice for Transfer	
Child Development	Child Development
Fire Technology	Fire Technology
Computer and Information Sciences	Computer and Information Sciences

Table 21. Credit CTE Award Earners, by Ethnicity

	2019-20	2020-21	Credit CTE students
African American	7%	6%	6%
Asian	13%	12%	10%
Filipino	6%	7%	4%
Latinx	33%	35%	37%
Multi-Ethnicity	5%	6%	6%
Native American	0%	0%	0%
Pacific Islander	0%	0%	1%
Unreported	7%	2%	2%
White	30%	31%	33%

Differences of 2% or greater are indicated with a green cell background for over-representation, and a red cell for under-representation compared to all credit CTE students.

Note. Credit CTE students includes all CTE students enrolled at the credit colleges in 2019-20 and 2020-21, unduplicated.

Table 22. Credit CTE Award Earners, by Gender

	2019-20	2020-21	Credit CTE students
Female	57%	57%	50%
Male	43%	43%	49%
Non-binary	0%	0%	0%
Unreported	0%	0%	0%

Note. Credit CTE students includes all CTE students enrolled at the credit colleges in 2019-20 and 2020-21, unduplicated.

Table 23. Credit CTE Award Earners, by Age Group

	2019-20	2020-21	Credit CTE students
Under 18	0%	0%	4%
18 - 24	41%	42%	48%
25 - 29	22%	22%	18%
30 - 39	20%	21%	18%
40 - 49	7%	9%	8%
50+	6%	5%	5%
Unreported	4%	1%	0%

Note. Credit CTE students includes all CTE students enrolled at the credit colleges in 2019-20 and 2020-21, unduplicated.

Table 24. Non-credit CTE Award Earners, by Ethnicity

	2019-20	2020-21	Non-credit CTE Students
African American	8%	7%	8%
Asian	14%	15%	12%
Filipino	6%	8%	5%
Latinx	41%	35%	38%
Multi-Ethnicity	4%	4%	4%
Native American	0%	0%	0%
Pacific Islander	0%	0%	0%
Unknown	2%	5%	4%
White	24%	26%	28%

Differences of 2% or greater are indicated with a green cell background for over-representation, and a red cell for under-representation compared to all non-credit CTE students.

Note. Non-credit CTE students includes all CTE students enrolled at the College of Continuing Education in 2019-20 and 2020-21, unduplicated.

Table 25. Non-credit CTE Award Earners, by Gender

	2019-20	2020-21	Non-credit CTE Students
Female	57%	64%	61%
Male	43%	36%	38%
Non-binary	0%	0%	0%
Unreported	0%	0%	1%

Note. Non-credit CTE students includes all CTE students enrolled at the College of Continuing Education in 2019-20 and 2020-21, unduplicated.

Table 26. Non-credit CTE Award Earners, by Age Group

	2019-20	2020-21	Non-credit CTE Students
Under 18	0%	0%	0%
18 - 24	12%	10%	11%
25 - 29	14%	13%	14%
30 - 39	33%	34%	30%
40 - 49	20%	22%	18%
50+	21%	21%	27%
Unreported	0%	0%	0%

Note. Non-credit CTE students includes all CTE students enrolled at the College of Continuing Education in 2019-20 and 2020-21, unduplicated.